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SPECIAL FEATURES

28 NAPOLEON RECYCLED!

Epic cycling adventures through Europe feature strongly on many cyclists' bucket list. Ride and Seek's homage to Napoleon Bonaparte's conquest of the Russian capital should easily make the grade. Not only for the history buff and velo gourmand; this ride will forge new friendships and deepen those you currently share.

36 ALL ROADS LEAD TO BATHURST

Despite the overt literal inexactitude of this statement, the efforts to enhance cycling in and around Bathurst are substantial and many of the varied facets of cycling are prospering in the region. We took the chance to visit the home of the Blayney to Bathurst sportive and experience the other treats in store for visitors.



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The man they call Iffy, once a powerhouse on the bike is now the driving force behind the Tour of Tasmania and one of the four man team behind GTR Events. Kieran Pender sat down with John Trevorrow to delve into his past and explore what his future might hold.

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Since the outset Cervelo has manufactured purely high end road racing bikes. The emerging 'road performance' market demands a new style of high performance machine and Cervelo has stepped into the space with their new C5. Peter Maniaty attended the launch as exclusive media from Australia.

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Always keen to discuss his views on cycling topics from fashion to pedalling technique Adam Hansen is a self-made man, and also the holder of some thoughts contrary to the popular wisdom. We spoke with Adam late 2015.



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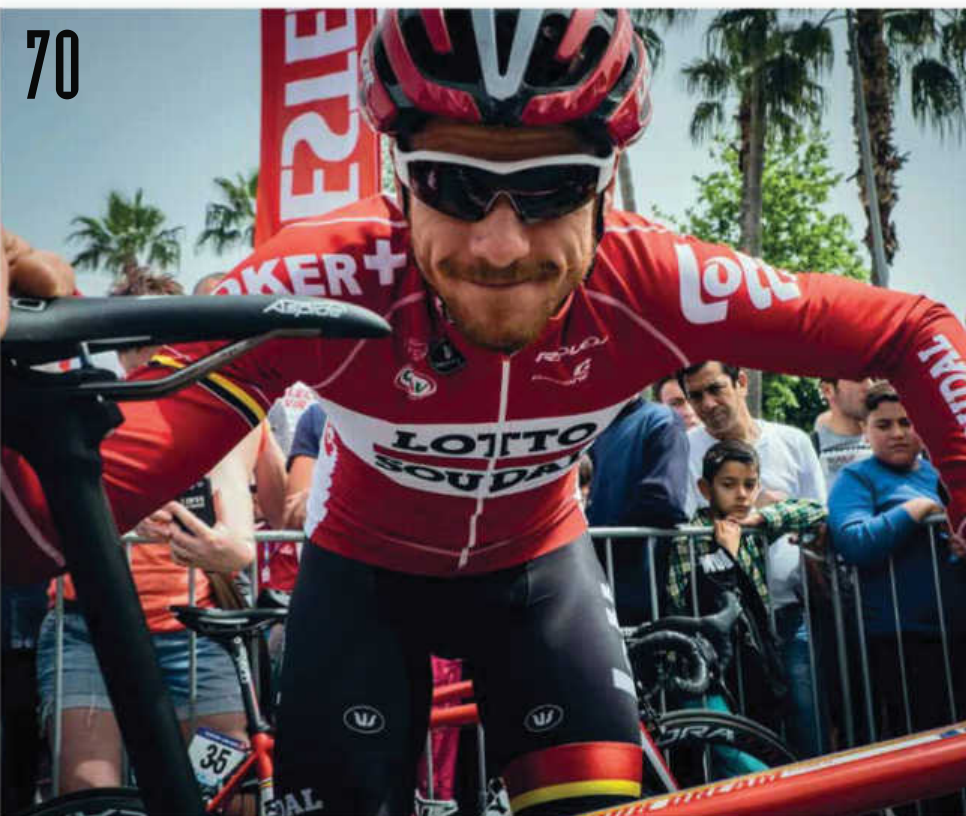
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Caleb Ewan's rise to glory on the world stage has been almost as fast as his last 100 metres.

We picked up a few pointers when we spoke with Caleb about how he approaches sprinting and deals with the big league.



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© Tim De Waele



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COVER: Pocket Rocket
Caleb Ewan takes the win at the People's Choice Classic criterium before the 2016 TDU proper gets under way!

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The Big Picture | Trollstigen Road, Norway

IMAGE BY EAMON FITZPATRICK



[[One sees great things from the valley;
only small things from the peak.]]

– G. K. Chesterton



The Abuse of Power



DISRUPTIVE TECHNOLOGIES are impacting many industries lately, hiving off chunks of mature markets, leaving the hapless incumbents little option but to adapt or perish. Massive super trawlers clean out the ocean's fish populations, where fleets of smaller independent fishermen once earned a living. Uber taxis are causing a furore in the traditional ranks. Digital media and music publishers are pushing analogue operators to lift their game. Electric vehicles are gaining popularity even here in Australia...on the Hume Highway midway between Sydney and Melbourne I recently observed a gleaming high-tech bank of Tesla recharging 'bowsers' located just behind the Shell servo next to the Dog on the Tuckerbox in Gundagai. Tesla's vehicles have a reputation for brutal power and technological refinement but I'm not sure how long it will be before there are queues for the service.

Industry is driving advancements in smaller, more powerful electric motors, and the push for renewables in industrial domestic and transport sectors is seeing huge leaps in the stored energy density of batteries. A couple of years back an electric motorbike won the iconic Pikes Peak Hill Climb competing against the best the petrol

driven establishment could offer!

This advancing electric technology could hardly be seen as a bad thing, but it is seeing niche markets emerge even in cycling. Pedelec bikes for recreational cyclists, commuters, and those less able are seeing massive sales growth in many European countries. Offshoots of electric bikes into mountain biking have the global MTB establishment up in arms, some defending the 'purity' of the sport, others their fellow dirt riders' reputation as hard men, and yet others are concerned about the possibility of accidents with bushwalkers due to the speed and relative silence of the electric MTB. The same umbrage and scorn is felt by sensitive roadies upon seeing the YouTube videos of clearly unfit riders in casual garb blasting past 'real' cyclists up a hill thanks to their ebike's power.

They're not the type of bike you or I would choose. But while there's some resistance to pedelecs and eMTBs, there is transparency there, batteries are not hidden. They, in the main, serve a legitimate market and can help many people to experience the joy of cycling. No harm, no foul.

But when Belgian U23 cyclocrosser Femke Van den Driessche was caught using a hidden motor in the world champs event, cyclists everywhere felt betrayed. And as the mass media globally picked up the story of yet another shameful lowlife in international cycling, it tore the scab off cycling's drug cheating wound that was on the way to healing. There was always going to be a scar, but in light of the endemic corruption in so many other sports of late, soccer and tennis, it was one many cyclists would have been prepared to leave open for public view; the remnants of self-harm that we have conceded, and have been striving to heal.

Let the healing begin again.

It's times like these it feels good to get out and ride my bike.

Cheers

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James 4:6, NIV

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Shane Sutton

HE MAY SPEND THE BULK OF HIS TIME IN GREAT BRITAIN THESE DAYS, BUT SHANE EDWIN SUTTON OBE GREW UP MORE THAN 16,500KM AWAY IN THE BLACK SOIL COUNTRY OF MOREE.

WIGGINS. CAVENDISH. Hoy. Pendleton. Whatever happens in Rio and beyond, Shane Sutton has already steered many of cycling's biggest names towards gold medals, rainbow stripes and world records. But beyond his stellar coaching palmarès, Sutton was also a highly accomplished cyclist in his own right, known for his uncompromising approach and aggressive racing on road

and track. "I don't think I've ever met a more volatile person in my life," once remarked a former teammate, Graeme Jones. "The amount of little scraps he'd get into. We'd be out on a training ride and if someone cut him up he'd be up for a fight!"

The younger brother of Gary, older brother of Steel and uncle of CJ, Shane Sutton was born in to what would become one of Australia's most

influential cycling families on 13 June 1957. One man who knows Sutton as well as anyone is Sonny Clissold, having trained him as a junior alongside his own son, John Clissold, also a national champion. "Gary was easily the toughest (of the Sutton boys)," Clissold explained in late 2014. "But Shane was smarter. In sprints I saw him grab the knickers of another bloke and pull them down under the seat. He was such a con man. A smart bike rider."

Throughout the 1970s Sutton's race smarts saw him build an impressive catalogue of results, including multiple state and national

Sydney Classic finishing first and fastest. However, Sutton's best result of the season came at the Herald Sun Tour where he won four stages on his way to claiming the overall GC riding alongside Neil and Brian Stephens. With further stage wins in 1984, 1987, 1988 and 1989, it was a tour that always brought out his best. Nevertheless on the other side of the globe another race had an even greater influence on his professional career.

For the best part of a decade Sutton delivered a string of outstanding performances in the famed British 'Milk Race' (these days known as the Tour of Britain). After finishing 3rd

[[Gary was easily the toughest... but Shane was smarter...]]

championships often with – and sometimes against – his older brother Gary. In 1978 the siblings travelled to Canada for the 1978 Commonwealth Games where they were part of the Australian quartet to win gold in the Team Pursuit.

Into the early 1980s Sutton was still competing on both road and track. In 1981 he placed 5th overall in the Herald Sun Tour and also recorded the fastest time in the Goulburn to Sydney Classic. Then, 1982 saw him win the Bendigo International Madison with Danny Clark, before the two crossed the Pacific to finish 1-2 against a star-studded field in the 100km US Pro Cycling Challenge in Baltimore. Sutton also lined up at the 1982 World Road Race Championships at Goodwood in England, but finished outside the top 50.

Sutton had another good year in 1983. This time teaming with brother Gary he defended his title at the Bendigo International Madison, took bronze in the Australian National Road Championships (a feat he repeated in 1984) and returned to the Goulburn to

overall in 1986 he became part of history when selected for ANC-Halfords as it became the first British team to compete at the Tour de France in 1987.

Sutton's character was to be sorely tested in France. By almost any measure the Tour was a disaster for ANC-Halfords, with two excellent books written by journalist Jeff Connor, documenting the team's three-week tale of woe that saw only four of its riders finish, with none inside the top 70. Sutton had the honour of being first away in the 6.1km prologue through West Berlin, however that was as good as things got. He finished more than a minute down in the prologue in 202nd place, struggled on virtually every stage and after two torturous weeks withdrew on Stage 13 with the Pyrenees looming.

While far from the Tour he'd hoped for, Sutton gives much credit to the experience gained in 1987. "When I look back ... none of the boxes were ticked," he told Jeff Connor in the book, *Wide Eyed and Legless*. "Now I make sure I tick all the boxes in everything I do. I did learn a lot from that Tour."

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PALMARES

SHANE SUTTON (Selected results)

- 1978** Gold 4,000m
Team Pursuit
Commonwealth Games
- 1982** 1st Bendigo
International Madison
(with Danny Clark)
- 1983** 1st US Pro
Cycling Challenge
- 1983** 3rd Australian National
Road Championships
- 1983** 1st GC Herald Sun Tour
(inc. 4 stage wins)
- 1983** 1st Bendigo International
Madison (with
Gary Sutton)
- 1983** 1st and fastest time
Goulburn to
Sydney Classic
- 1984** 3rd Australian National
Road Championships
- 1986** 3rd GC Milk Race
- 1987** Tour de France,
ANC-Halfords
(abandoned Stage 13)
- 1990** 1st GC Milk Race
- 1993** 3rd British National Road
Race Championships
- 1998** Coach of the Year, Sports
Council for Wales
- 2008** Coach of the Year, UK
Coaching Awards
- 2010** Officer of the Order of the
British Empire (OBE)

Bloody but unbowed Sutton returned to Britain and continued to play a key role as a highly respected team leader and domestique during the late 1980s and early 1990s. Repeating his earlier feats in Australia, he also finished 3rd in the 1993 British National Road Race behind former ANC-Halfords teammate Malcolm Elliott.

The ups and downs of pro cycling were perhaps no better illustrated than by the events surrounding Sutton's famous overall win at the 1990 Milk Race when riding for the superbly named British team, Banana-Falcon. Suffering from knee tendonitis he only confirmed his starting place at the last minute. Sadly, a sore knee would become the least of his concerns as news came mid-race that his father Ted had passed away in Australia after a long struggle with emphysema. Sutton vowed to win for his late father, and he did just that.

By the mid-1990s Sutton's professional racing career was drawing to an end. He transitioned into coaching with Welsh Cycling before being ushered into the ambitious British setup

in 2002. The next decade would see him become an increasingly central figure in the golden age of British cycling, which culminated with his appointment as British Cycling Technical Director in 2014.

Following Great Britain's outrageously successful Beijing Olympics, Sutton was asked to explain his coaching philosophy in an interview with the BBC. "I'm a can-do coach, I make things happen and I expect the athletes to also have that attitude. Our philosophy is to go faster than everybody else to kill off our opponent. We are British, we are bulldogs, we are warriors and fighters."

It's an approach that clearly resonates with riders, even if it leaves some more than a little wary at times. "You want Shane in your corner," explained Geraint Thomas in his entertaining book, *The World According to G*. "But you don't want to upset him. Shane's bollockings are probably the most frightening of all the coaches."

Under the massive weight of local expectation, the 2012 London Olympic Games was yet another high point in Sutton's coaching career, with the host

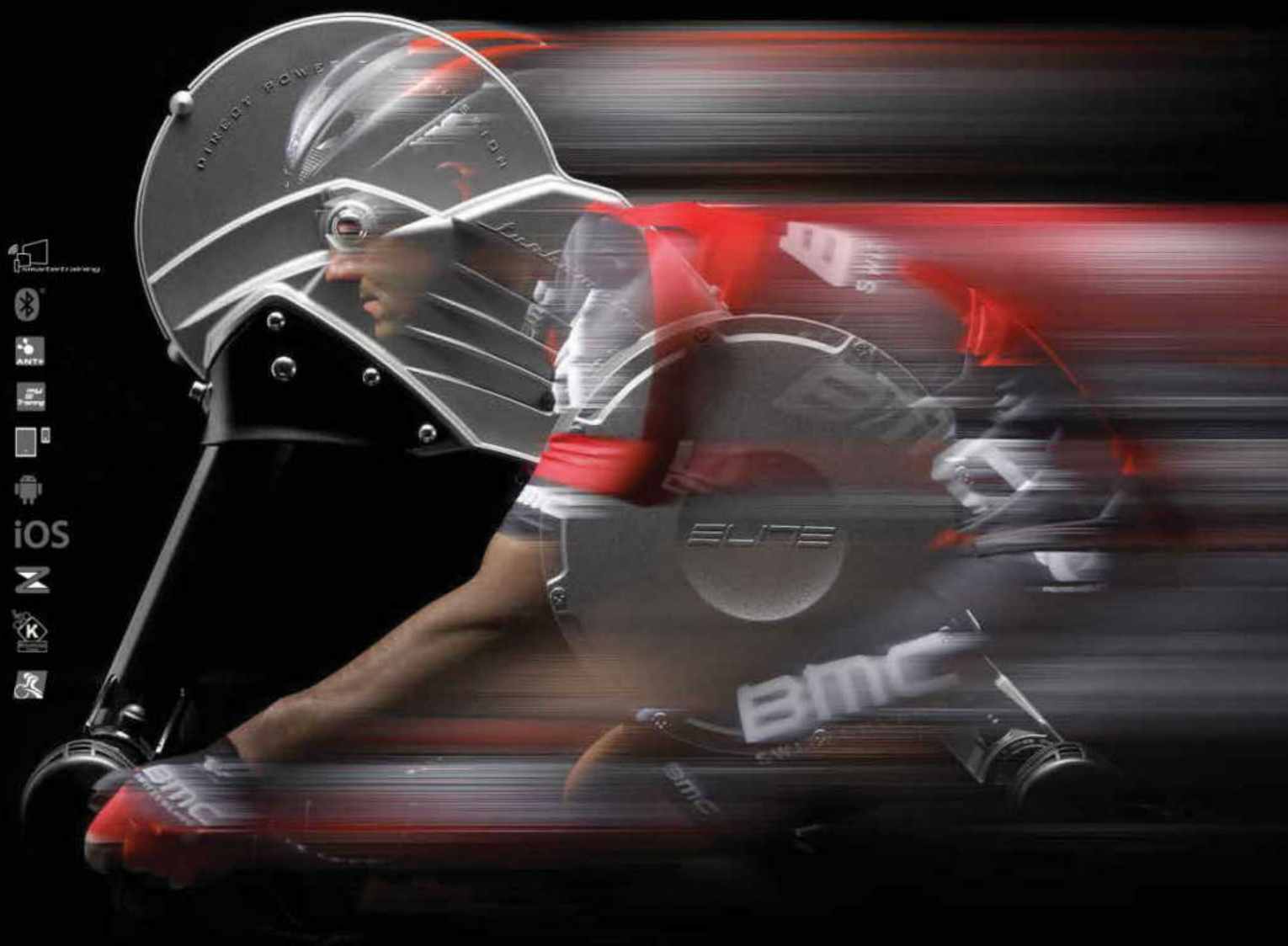
nation claiming a stunning haul of eight gold medals to repeat its achievements in Beijing. However, not long after the Olympics Sutton suffered serious injuries in an accident involving a car while riding in Manchester. Despite being placed in an induced coma with swelling on the brain, fracturing his cheekbone, suffering suspected broken ribs and remembering nothing of the accident, he was back trackside within two weeks. When asked about the cycling community's reaction to his accident Sutton smiled as he told the BBC, "Damn, we nearly got rid of him!"

Guiding the likes of Clancy, Thomas, Wiggins, Trott and Kenny, Sutton will again be a central figure for the British team at the 2016 Rio Olympic Games in August. Only time will tell how many chapters remain in his coaching career after that. But it's already been quite a ride. "Shane's won pretty much everything there is, either as a rider or a coach," reflects Sonny Clissold. "He's been invited to Buckingham Palace for a cup of tea with the Queen. He even has an OBE. Not bad for a kid from the black soil country of Moree." 🍷

TOP LEFT: Sutton celebrating with Geraint Thomas at the World Track Championships in Melbourne 2012.

TOP RIGHT: Sutton with UK track star Sir Chris Hoy at the 2008 Olympics.

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Powerhouse – Part 2

THERE ARE NUMEROUS POWER METER OPTIONS THESE DAYS BUT WHAT FEATURES WILL YOU NEED TO CONSIDER WHEN PURCHASING ONE? WE SPOKE WITH DAMIAN MASON FROM THE WATTS FACTORY, WHO TELLS US HIS TOP PICKS FOR 2016. THEN WE LOOK AT POWER METER TERMINOLOGY, VIEWING YOUR DATA, IDENTIFYING YOUR STRENGTHS AND WEAKNESSES.

BUYING A POWER METER: WHICH POWER METER IS RIGHT FOR YOU?

HAMISH: Someone walks into the Watts Factory on a Monday morning, what are the key questions that you need answered to help them choose the right power meter?

DAMO: First off we need to know what they intend to use the power meter for; are they road, mountain, track, time trial or triathlon cyclist. Are we looking at it staying on one bike or being able to interchange between two bikes? Also physically, what brand bike they are riding? This is important due to bottom brackets and crank clearance

issues. As an example, a Powertap may be a great training option for a rider with a road bike and a TT bike as it can be easily swapped between bikes but as soon as the race wheels go on the power meter comes out.

Establishing the primary use for the power meter will help us to decide which meter will suit the athlete best.

HOW DO THE VARIOUS BRANDS DIFFER?

Typically, with different brands we see a different method of measuring the power output (see previous article). For example, Powertap in the wheel hub, Garmin Vector Pedals,

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RIGHT: Wahoo's new Elemnt has a very intuitive interface with your smartphone, making it easy to learn and to use.

Quarq, SRM and Rotor in the spider of the crankset, whilst with Stages, Pioneer and 4iii the sensors are bonded to the crank itself. All power meters will quote levels of data accuracy. The method of power measurement will affect the overall accuracy. SRM use eight strain gauges which provides a smoothness in the power data better than any other brand. Stages on the other hand simply multiplies data from the left leg by two to give the overall power measurement. Several power meters offer left and right balance: Pioneer, Quarq, Rotor and Info Crank to name a few.

WHICH FEATURES DO YOU SEE AS ESSENTIAL AND WHICH COULD BE CLASSED AS EXTRAS?

It comes back to application, what do you want the power meter to do? If you simply want a number to look at, that is consistent with effort, then a single sided power meter would be fine. If you need to see both left and right legs or power balance, then a power meter that measures left and right data is essential. Power balance is far from essential to the average rider, but someone who has a known lower limb issue or discrepancy may benefit from dual sided data. If higher accuracy is required, then a dual sided is also preferable. Vectors, Powertap P1 and Pioneer also look at pedal efficiency. This is nice to have and cool to look at but unless you know how to use the data that is presented it can be of limited benefit.

ARE THERE ANY TRAPS THAT POTENTIAL BUYERS CAN FALL INTO WHEN LOOKING TO PURCHASE A NEW POWER METER?

There are several different bottom brackets out there, these days up to seven or eight at last count, so not all power meters will fit every bike. Making sure you pick

the correct power meter for your bottom bracket and frame is a must. Paying extra for a top of the range power meter, that gives you tons of data, only adds value if you intend to use it or have a coach who will do it for you. So choose a power meter that provides the level of information that suits your needs.

IT SEEMS LIKE OVER THE LAST FEW YEARS THERE HAVE BEEN NEW OPTIONS COMING ON THE MARKET ALL THE TIME. WHAT SHOULD WE BE ON THE LOOKOUT FOR IN 2016?

Good question, the day is coming when power meters will be integrated into the cranksets and you will be able to buy a bike with a pre-installed power meter as part of the groupset. This will make a big change to the third party manufacturers and suppliers. At this stage however, it is possibly still some way off. For now, power meters that are bonded to the crank seem to be the preferred option. Working with carbon cranks and getting accurate and reliable data also remains an ongoing issue. Pedal based systems

are continuing to grow in popularity with more beginning to appear on the market.

WITH ALL THIS TO THINK ABOUT, HOW DO I MAKE THE RIGHT DECISION?

You need to consider the following: cost, application (bikebrand/type, racing or training and one bike or two) fitment (will the power meter actually fit your bike) and data requirements. Once you consider these four factors the brands available to you will be narrowed and choices can be made.

Once you've chosen and installed the right unit for your needs, the question becomes "How do I view, log and review my data?" First let's do a quick review of some common power training terminology that will be useful in helping understand the data.

POWER TRAINING TERMINOLOGY

I don't want to dig too deeply into training terminology. However, having an understanding of these terms will allow you to more efficiently and effectively utilize your new toy.



HAMISH GORMAN



Hamish Gorman is an exercise physiologist and cycling coaching, working clinically with Sydney Sport and Exercise Physiology and coaching at FTP training. He enjoys riding, running and surfing. He occasionally over indulges in physiology lingo and training studies if you want more information on anything discussed in the article feel free to get in touch at h.gorman@ftptraining.com



CAMPAGNOLO, THE SOUL OF CYCLING

Those who are serious and passionate about cycling pay maximum attention to every single detail.

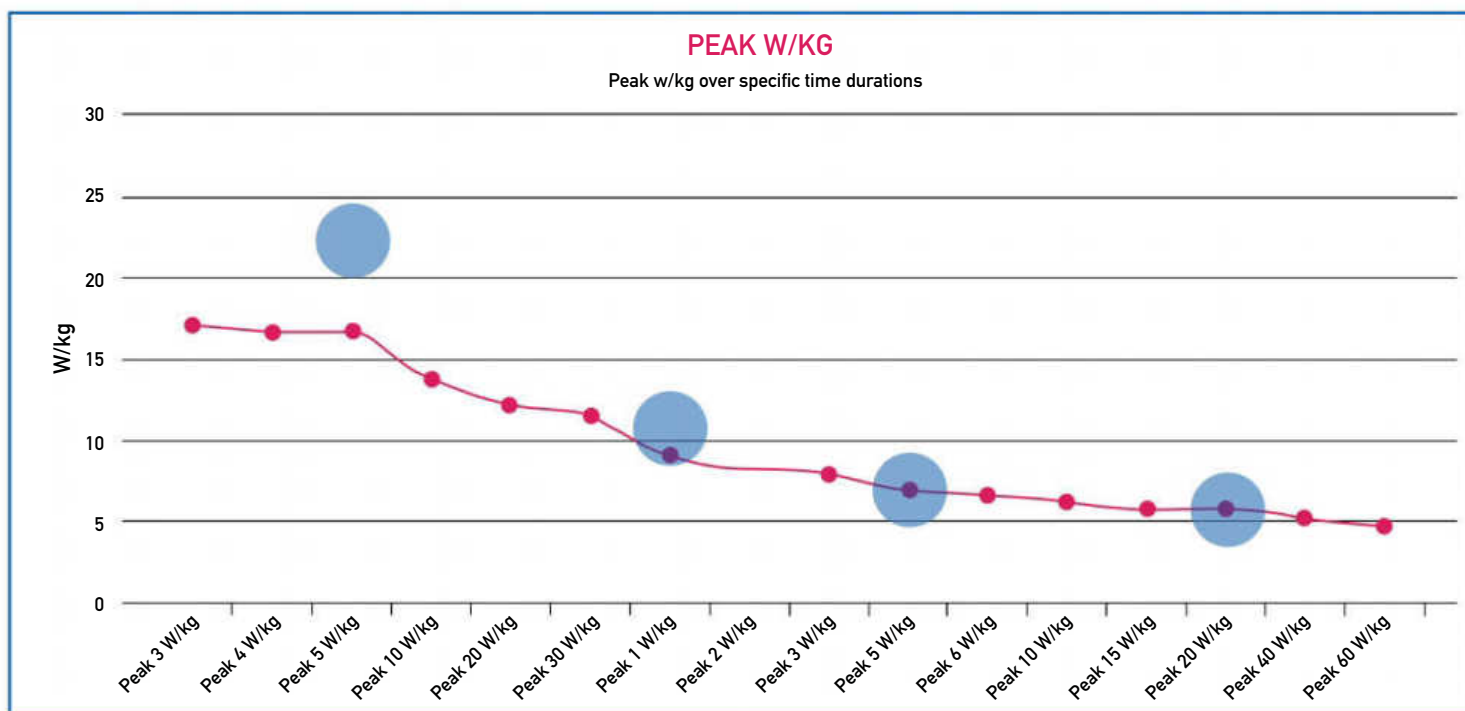
Great performance, lightness and sophisticated materials that last become must-have values.

Campagnolo wheels and groupsets give you all this and much more... because they represent the soul, history and future of true cycling for real emotions.



Campagnolo

CAMPAGNOLO.COM



[[Live power metrics can be used for prescribing training intervals, judging pacing whilst racing, monitoring recovery and training load...]]



Functional Threshold Power (FTP): First proposed by Dr. Andy Coggan, this term refers to a rider's highest sustainable power output over a 45-60 minute time period. FTP is commonly used by cyclists as a way of establishing training zones and monitoring changes in performance over time.

The most common FTP test involves determining 95% of the average power from a 20 minute all out time trial.

Intensity Factor (IF): This is an indication of how hard you are working in relation to your FTP. It can most easily be thought of as a percentage of FTP.

Normalised Power (NP): Power output during most cycling races and training sessions is not a consistent effort. This inconsistency comes at an increased metabolic cost. The calculation of NP attempts to predict the power that could have been maintained for the same metabolic cost had this effort

been perfectly constant.

Training Stress Score (TSS): Is a method of quantifying the work load of a particular session which takes into account both intensity and duration.

VIEWING DATA WHILST RIDING

The simplest and most important place to access and view the data that you generate from your power meter is on a headset whilst riding.

The most common brand of head unit on the market today has to be Garmin though other models such as Magellan are starting to make some headway into the market.

The head unit allows a rider to view and monitor their power metrics whilst on the bike. Live power metrics can be used for prescribing training intervals, judging pacing whilst racing, monitoring recovery and training load, just to name a few.

All head units allow a rider to select a wide variety of

variables to be displayed on the screen at any one time, however screen real estate can be at a premium. It is important to carefully select the metrics that you display and make sure that they are relevant to your current ride or training session.

On a regular ride my favourite way to display power meter data is as a three or five second average which works to smooth out the fluctuations which inherently occur in power output. This allows the athlete to work towards holding a more consistent effort without worrying about second by second power fluctuations.

Workouts can also be downloaded onto the head unit and alerts can be preset to tell a rider when they are working too hard or too easy.

REVIEWING YOUR DATA

With all power meters it is possible to record and log data so that it can be reviewed at a later date. This data is usually used in association with other data collected at the same time including GPS position, heart rate, speed and cadence.

The major reasons for logging your data and analyzing it are:

- 1) Identifying strengths and weaknesses
- 2) Evaluating the effects of equipment and positional changes
- 3) Tracking training trends
- 4) Analysing racing and training



TOP LEFT: Pioneer's Gen 2 crank based power meter is fairly new to the market and requires technical assistance for installation, but does measure power on both sides.

BOTTOM LEFT: Long term players SRM are widely used throughout the pro peloton. They also use a crank based meter which means switching bikes is difficult and unlikely.

Multiple programs exist to make the best use of the data but I would highly recommend these three particular programs that I have found to be useful in the past. They are; Today's Plan, Training Peaks and Golden Cheetah.

All three of these programs provide a platform from which to review your training data and can be easily found with a quick google search online. They provide a wide range of in depth comparison methods which allow an athlete or coach to conduct a thorough analysis of a rider's training and racing.

IDENTIFYING STRENGTHS AND WEAKNESSES

One of the most common uses of power meter data is in talent identification and analysing an athlete's strengths and weaknesses.

Once an athlete has been utilising a power meter for more than one or two rides we start to build a data base of what they are capable of. This is most easily expressed via the power profile curve (see chart on page 22).

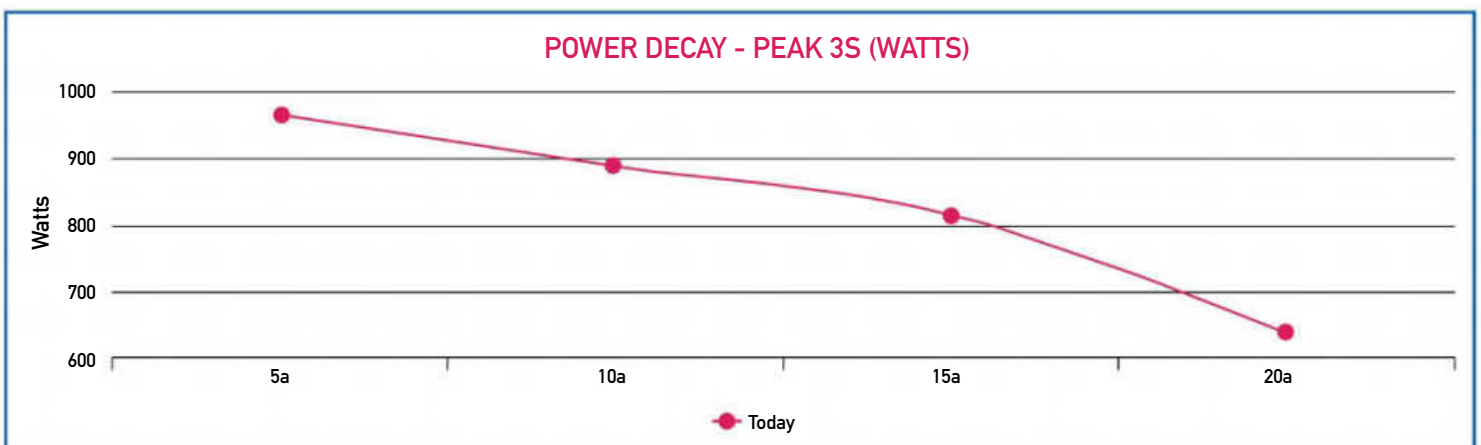
The power profile curve lets an athlete or coach look at the power output in watts/kg over a large variety of time frames. The blue circles in the graph above represent what we would consider to be the power output of a professional cyclist. However, we would not necessarily expect an athlete to have an elite power output across the whole spectrum. In this case we can see that our athlete has a very good power output over the five and 20-minute time periods but would not be considered to be a professional sprinter. This graph allows us to determine how a rider performs relative

to their peers over a variety of time periods.

POWER DECAY CHART

By looking at the power decay chart (page 23) we can take a detailed view of the top end of the power profile for a given ride. For the rider in question here we can see that the rate of decay in his power output dramatically increases at around 15 seconds. What this means is that for this rider to make the most of his sprint he really needs to keep it under 15 seconds, but probably more like under 12, if he is to maximize his effort.

In the next article we will continue to expand on the methods of analysing training and racing data as well as helping new users get their head around some of the most common graphs and tables they are likely to come across. 🧠





BELLWETHER HERITAGE

With dual zone fabric construction Bellwether's heritage jersey will keep you cool and dry. The fitted, harlequin design has an appealing retro feel and it's backed up by Bellwether's good quality manufacture. It's a three pocket design with full length zip and reflective piping on the back and rated at 30+ UPF. The bibs' ergonomic panel design features firm compression and supports a high density 3D molded chamois. The Heritage knicks have high sides and back and a wide stretch band on leg hem with silicon grip.

RRP: Jersey - \$ 129.99
Bibs - \$189.95

Distributed by Velo Vita
www.velovita.com.au



INFINI MICRO LUXO LIGHT

Despite the long daylight hours of summer, reliable lights are very handy for late riders or those who love the early morning roll. Infini's Micro Luxo is very tidy; just 6cm x 2.5 and 50g. It has an o-ring strap, and li-ion battery that will see you right for up to 12 hours on flashing mode or 1.5 hours if you choose the super-bright 200 lumen setting.

RRP: \$69
Distributed by Southcott Industries
www.southcott.com.au



Top Gear

A SELECTION OF INTERESTING ITEMS THAT CAUGHT OUR EYE ...



ASTUTE SADDLES

The Astute company is the result of several Venetian artisan saddle designers coming together to create a broad range of lightweight classy looking saddles for your perusal, and riding pleasure.

The Skycarb SR (just 145g) is their top end model, with carbon rails beneath a uniquely shaped shell and three layers of memory foam. The Skycarb VT has a pereneal cut-out. The range was on display at the Tour Down Under, and in the flesh these look very impressive indeed.

- Astute SKYCARB RRP \$595.00
- Astute SKYLITE RRP \$375.00
- Astute TIMELITE RRP \$399.00
- Astute STARLITE RRP \$375.00

Distributed by FE Sports
www.fesports.com.au



MECHANIC GRIP GLOVES

Designed for long-term use and durability, these gloves provide the ultimate in grip, protection, and dexterity.

They're latex-free and feature a tactile-enhancing polyurethane coating that seals out grease, oil and grime. A textured surface on the palm-side of the glove provides enhanced grip, while the upper fabric is breathable, which helps keep hands cool and dry. Unlike costly single use gloves, one pair of Grip Gloves can last for many weeks.

RRP: \$9.99

Distributed by Velo Vita www.velovita.com.au



RADAR EV PATH

The wrap around design and lower edge of the Radar EV lens is designed to follow the contour of your cheeks—and the result is impressive wind deflection; very little breeze gets in your eyes. Meanwhile, and more to the point with sunglasses, the burnished metallic reflective lens does offer good glare reduction, while the overall look of the glasses may intimidate your rivals with some sharp attitude and 'glare enhancement'.

RRP: \$249.95

www.oakley.com



STAGES FOR CAMPY

Some good news for Campagnolo riders who've been looking for power meter options; Stages has just launched their Campag model. The new Stages power unit is slimmer and less visible than before, though in reality you'd be hard pressed to see them at all, and they offer the full benefit of a modern power meter.

RRP: \$1399 for Super Record,

\$1199 for Record

\$1049 for Chorus.

Distributed by FE Sports

www.fesports.com.au



ISOWHEY CREATINE + HMB

Isowhey are making quite a splash in racing with their range of supplements at present. Along with various energy bars, gels and hydration formulas they have some pre and post workout products designed to enhance performance. Their Creatine + HMB powder is mixed with water and said to increase strength and lean muscle mass. One of our office 'lab rats' says the taste is not unpleasant and he'll check back later with results from his trial.

RRP: \$39.99 for a 250g tub.

www.isowheysports.com.au



ROUNDER THAN ROUND

Absoluteblack have launched their new range of road chainrings, with availability from early March 2016.

They claim many road riders have a tendency to 'mash' their pedals and need help to perfect their spin and smooth out power delivery. Also that their design works with human physiology, delivering a spin sensation that feels 'rounder than round'. Climbing takes less effort and knee strain is reduced. Despite the name they come in three colours black, grey or red.

RRP: Inner ring \$110

Outer ring \$220

Distributed by SCV Imports
www.scvimports.com.au



ZIPP DELUXE

Wider aero carbon rims continue to emerge and Zipp have just announced their latest wheelset; the 58mm deep 404NSW clincher. They are claiming improved braking performance, exceptional aerodynamic efficiency, and unparalleled crosswind stability from the 26.4mm wide rims, as well as exceptionally low drag from the Cognition freehub—all exactly what you are looking for in your next set of wheels.

RRP: \$4,999

Distributed by Echelon Sports
www.echelonports.com.au



FABRIC SADDLE

The Fabric ALM saddle is an impressive piece of ingenuity made in conjunction with the engineers from Airbus Group Innovation in the UK.

It's made with Additive Layer Manufacturing technology, (fancy lingo for 3D printing) which enables previously unachievable forms for carbon material from the aerospace industry. Weighing in at just 140grams it features carbon rails and with a leaf spring design to absorb impact. Even though the seat is thinly padded it looks like it would be comfortable.

Only available in the one size, it measures 142mm wide and is 282mm long. Distribution is yet to begin to Australian stores.

RRP: circa \$400

Distributed by Monza Imports www.monzaimports.com.au



FORZA, VICTORY, OPTIME!

These socks from Bellwether have a five inch cuff height, reinforced heel and toe area and are made from a Coolmax and microfiber blend for comfort and durability. But what you really need is socks that match your favourite kit, right?

SIZE: S-XL

RRP \$19.99

Distributed by Velo Vita
www.velovita.com.au

DISC READY.



CAYO ULTEGRA DISC

The CAYO has long been the go-to-bike of the Focus range. With the 2016 Cayo Ultegra Disc performance is elevated to a new high. Our award winning R.A.T thru-axle system coupled with an 880g (average across all sizes) frame ensures you are perfectly equipped for your next granfondo, club run or weekend adventure. CAYO. WE ARE DISC READY.



www.focus-bikes.com // facebook/focus.bikes

FOCUS
GERMAN ENGINEERED



Ride and Seek: Paris to Moscow

BY MAX HOFMAN

IMAGES BY MARK TAYLOR

NAPOLEON! RECYCLED

RIDING FROM PARIS TO MOSCOW WOULD BE A HISTORIC AND MONUMENTAL ACCOMPLISHMENT FOR ANY CYCLIST, IN A SIMILAR, THOUGH LESS BLOODY, VEIN AS NAPOLEON BONAPARTE'S CONQUEST OF THE RUSSIAN CAPITAL. READ ON FOR THE JOURNAL OF INTREPID VELO ADVENTURER MAX HOFMAN, WHO WAS, AND CLEARLY REMAINS, IMMERSSED IN HISTORICAL WONDER AT HIS ACCOMPLISHMENT.

The turrets of Lake Trakai castle; once the defensive outpost for Vilnius, now a tourist and water sport destination of spectacular beauty.



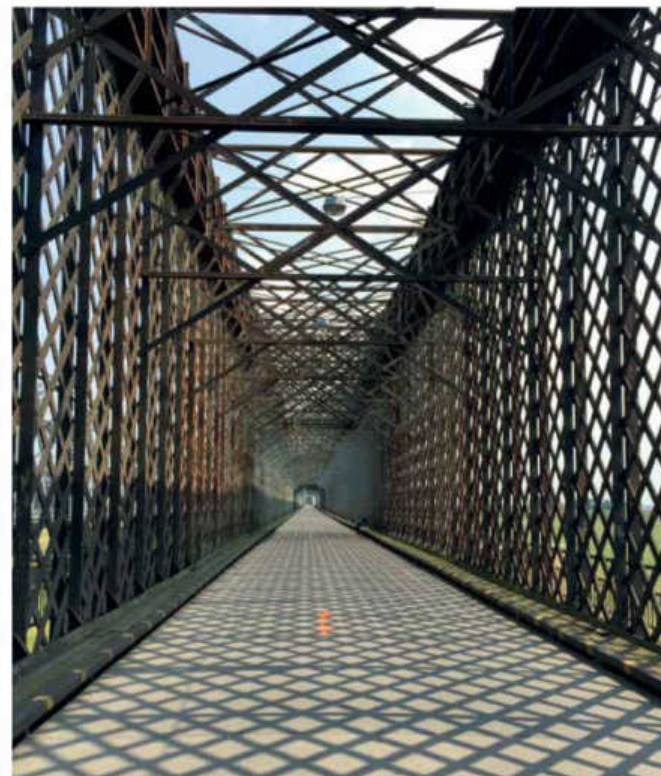


CLOCKWISE FROM TOP LEFT: What more could one ask than for a pit stop at the famous Moët and Chandon Champagne House, in the midst of one of the world's finest wine regions.

Chateau Montheirons on the outskirts of Verdun, which escaped the carnage of war, remains a symbol of grandeur and haute cuisine.

The kaleidoscope bridge in Tczew, which crosses the Vistula south of Gdansk, creates a dappling illusion of light.

Rhine land sunflowers were the ubiquitous floral backdrop to the castles and fortifications of olden day Prussia.



MY ENTHUSIASM FOR riding - from perspectives we all share as parents, offspring and siblings - and my confidence in you, the reader's, sympathetic indulgence of my personal sentiments and subjective reflections, imbues me with the necessary motivation to tap away at this Spanish keyboard well into the night. While I cannot describe more than but the tip of an iceberg, my large snouted (nobly so) perceptions will be delivered from my own handlebar view of that wonderful bike-world we engage in. For non Ride and Seek Fideli, if you find this recount engaging, I will have managed to strike a chord of empathy amongst the ever growing peloton of bicycle adventurers. I am but one of the dynamic crew who experienced the first Napoleon epic; and I sincerely hope my recollections cover some of what we all lived together, for those glorious, bike

filled seconds - all 3,888,000 of them - on Napoleon's inaugural ReCycle from Paris to Moscow!

Many times during this grand adventure, we would ponder and discuss the fate of the million or so souls who were lost during the 1812-13 Napoleonic carnage! Unlike the original soldiering journeymen who force-marched this multi-country campaign, the odds were stacked much more in favour of our success! In the two centuries that have passed since the incredible warring epic took place, those who have since attempted to replicate the journey under their own steam are but a select few, not all of whom succeeded! Being a part of a group of cyclists to have the opportunity to do this was a privileged experience that time will never diminish, for until our team passed that ephemeral tape into Red Square, completion was a dream without apparent precedent and certainly with no guarantee of success!

Replacing the magnificent 40,000 strong equine fleet of 1812, was a

selection of the world's finest twist-strengthened titanium, hollowed carbon and high tensile steel, combined with top line kinesthetic physics and inventive mobile mechanics; all of which increased our individual and group chances of completion. As well as our flyweight techno equipment, the mono directional advantage and seasonal selection for this adventure, excluded us from the factor that led to more carnage than wrought by any of the Napoleonic battles - cruel mother-nature - who for us, could not have been a more kindly influence!

On July 17th, with the words of renowned historian and author David Markham freshly ringing in our ears from the previous night's gourmet Napoleon launch, we set off. We were almost three score, leaving as one from the symbol of Napoleon's greatness, the iconic "Arc de Triomphe", to retrace one of history's greatest human tragedies, by bike! On that crisp Parisian morning, the excitement was barely containable as we exited from



[[...I recall the tears of pride and laughter that flowed that day, as that thick and furry Hull accent hilariously cursed my dad's back wheel...]]

the famous city landmark and set off on 'Rue Wagram' through the city's sleeping underbelly and out towards the peaceful Paris canals, which soon delivered our adrenaline-gorged, fiercely-spinning legs into the great expanse of continental Europe. Thereafter our feet and knees would continue to spin for 45 days, with one day of rest a week - covering some 4300 km by revolving an estimated 20 million collective peddle strokes - before we toasted our arrival in Moscow atop the Ritz Carlton's extraordinary 02 bar which overlooks the ancient citadel that had risen emphatically from the ash pile of 1812 /13.

To be part of a group who were as culturally and socially dynamic as they were physically motivated, was a pleasure that accompanies adventures of such magnitude. During the course of our six and a half week navigation, mutual respect flowered into admiration, friendship and an interdependence that superseded any previous sporting event I have been involved in. On a personal level, my

enjoyment was multiplied by the presence of Ride and Seek Fideli (with whom I had previously ridden on the foundational Hannibal epic), a guiding and support team of exceptional cycling and guiding ability led by Sam 'RLA' Wood along with 'Velovation' Mark, whose legendary lead-outs were as sublime as Simone - the 'Sardinian sorcerers' - more savory administrations; and most importantly, by the presence of family and close friends. By the time we reached our destination, the nuclear, Napoleonic family was as snug a fit as our sparkling custom made 'Paris to Moscow' Danny Shane tartan kit.

On that memorable first day, as we rolled through the voluptuous vineyards of the famous champagne region en route to the first of many a magnificent chateau, much of the bike banter was inevitably focused on the magnitude of the journey. But with the hunt for Russia underway, the trepidations of the task ahead soon became but ephemeral vibrations, which thereafter dissipated along with the symbolic

sprinkling of post lunch rain. Unfortunately for me (it wouldn't be a story without a prang - but the first day!), the precipitation was to be my personal warning knell, which just as fortunately did not sound again for the remainder of the trip!

As I farewelled the group of well-wishers who had ridden with us to our first lunch spot on the outskirts of Europe's 'cultural centre', I dallied further to converse with an interested local, before setting off to catch our fervent flotilla. As I rounded the top of the first real climb and began descending in pursuit of that dare-devilry inherent in every downhill enthusiast, I was simply too excited to adhere appropriately to the tenets of wet weather cycling, especially when gravity is your wonderful assistant and I duly paid the price; schoolboy error! An oil-slicked bend, rendered doubly hazardous by the sprinkle of rain, and that was both sharper and longer than I had judged, became my beating stick. As I floated horizontally for that infamous split second of painless and timeless reflection, I wrenchingly felt my dream shatter, along with the images of fractured bones and tarmac-smitten flesh!

The latter was unavoidable as I skidded across the greasy surface and into the guard rail, which halted my slide with a metallic punch to the left buttock. However, that immediate fear that I had caused myself some grievous bodily harm did not



CLOCKWISE FROM TOP LEFT The sequestered Saxony village of Weisman, where coffee flavoured gelatos fuelled our engines for the monoliths ahead!

Hotel 'Saigerhutte', which rose from the medieval ruins in Olbernau, has become the epitome of German cultural elegance; sipping 'Henkell Trocken Sekt' (German Champagne), served by buxom lederhosen'd beauties.

Magnificent Malbork castle on the banks of the Nogat river, is pure Polish splendour and ranks as one of world heritages most perfectly preserved fortifications from the Teutonic age.

The ultimate cycling patriarchs 'Big Al' and 'Pistol Pete' leading their bike herd fearlessly through the endless Polish back roads.



materialise! I remember bouncing back to the upright like a pop-ball, at the same time patting my body furiously all over in the typical, post-stack-stance, just waiting for that deep ache that would groan of a bone out of sorts! I have had my fair share of bike crashes but at that moment I almost cried with the relief that I had not ruined my part in the epic journey before it had even begun! While I would make the repayments to my body for the impact damage until well into the third week of the campaign, I was whole and able, and I willingly paid homage to the guardian who had protected both me, and the majestic Lynskey, from more serious damage. As I checked over my titanium Pegasus, I marvelled again at my luck on falling on the non-drive side, the only damage being some ripped handlebar tape on slightly skewed bars. I actually chuckled with relief at the rising haematoma on my thigh and shoulder as I remounted, to peddle, gingerly and very steadily towards the celebrations awaiting our party on that first crepuscular Champagne evening.

As we settled into our individual rhythmic styles, the days rolled on as languidly as our obedient quads through the stunning countryside of agricultural France, from the postcard landscapes that segued from the verdant and vine-trellised hills, to the undulating wheat belt and its many sequestered riverside villages, our senses were constantly piqued. On those languorous miles, our muscles hardened to the continual grind in preparation for the German mountains ahead, our party rode on and on, in a constant state of flux, chewing the fat on every subject as we crunched the kms. By the end of the first stage it felt as though we had been riding for a month, not a week. For me, the stage ended with a bang as I took a turn at accompanying the aptly named Bob Berg on his amazing steel tandem, giving his wife Sandy a much needed break (from Bob, not the bike!). I hopped on that peerless blue machine, with one of the world's top septuagenarian cyclists and stiffly tumbled off a couple of hours later with a whole new respect for the art of tandem-cycling and the veritable masters of the art!

The diversity of professions and life experiences within a group that ranged in age from the thirties to the seventies never left one wanting; and today more so than ever, that is the glorious benefit of modern cycling, as we access equalizing technology and equipment, that allows us to make excursions into the great unknown world of cycling possibilities, with our parents, children and all manner of interesting binary-rolling folk in an age-group that ranges across decades of

[[...If the dank smells in those beautiful forest surrounds did not heighten one's sense of the surreal, the cuisine of pork knuckles and sauerkraut, washed down with delightful quaffs from the timeless and bottomless ale barrels, certainly helped (those who ride hard, play hard, no?)!]]



Ride and Seek is a worldwide adventure cycling company offering unique historical itineraries with quality lodgings, fine gastronomy and cultural immersion. The Napoleon - Paris to Moscow tour is one of their Epic Adventures - other offerings include Hannibal - Barcelona to Rome, and Caesar - London to Rome. Check out all their tours at www.rideandseek.com.



like-minded cyclists who refuse to hang up their bibs!

As we crossed our first international border and entered a world richer in fantasy than a story by 'The Brothers Grimm', the undulating topography of the mighty Rhine, gave rise to the mountainous terrain of olden day Prussia. Having the inspiring ruins of 'Frankenstein's castle' as the stage two warm up ride, did little to detract from the notion that we were cycling through a parallel world; where fantasies and fables lurked within the fathomless forests. The spectacular view east from atop the aforementioned castle was as close to a Tolkein vista as can be imagined and I was not the only one who felt slightly dwarfed by the expanse of forest and church-spire'd villages that lay along our path towards the rising sun still some three thousand odd kms distant! Somewhere beyond the Saxony horizon was the medieval town of Bautzen, where awaited another rider, Bailsy, an old mate from Sydney Uni. Here after known as 'Bavarian Bails', he kept us enraptured by his antics, both on and off the bicycle (including a tip over a fence that

should, like my first day tumble, have had much greater consequences for both body and bike!).

If the dank smells in those beautiful forest surrounds did not heighten one's sense of the surreal, the cuisine of pork knuckles and sauerkraut, washed down with delightful quaffs from the timeless and bottomless ale barrels, certainly helped (those who ride hard, play hard, no?)! Whether served by Monks in habit or penguin-tailed waiters with plentiful cheese platters, the gastronomy that awaited us each night was nothing short of Hestonian in taste and presentation; and indeed we deserved such pleasures, for the back road climbing was exacting its toll - with one Garmin kicking in just over 180kms after a few investigative diversions! But with a stage of strength behind us, we powered merrily along as the hilarious German guide and photographer 'Dirk -The Giggler-', kept our spirits high. Local interest and support, meanwhile took on Germanic proportions, culminating in an appreciative spread in a national paper as a reminder of the type of adventure upon

which we had embarked! With the 200 year celebrations being held, it seemed the whole of Europe was still buzzing with Napoleonic fervor and our kits and their significance was missed by few!

I felt both relieved and sad when we saluted farewell to those spectacular mountains, and descended into the immense water-logged basin of Poland, where the riding once more adopted a rhythmic and almost soporific grind. In the 'Grand Duchy of Warsaw', as it used to be named, we found the folk and their palatial accommodations to be of exceptional quality. From Ziggy's imperial mansion- where we were treated to an intensely delivered account of his war encumbered nation along with the finest of foods in that palatial heaven!, to the ramparts of Rezel castle, it was as if the nostalgic pace had suddenly picked up, along with the raw passion of this historically warring zone, in comparison to their 'chilled continental neighbours'. The German media was topped by a Polish news crew turning up to film our morning ritual



as we departed one of Poland's finest mansion restorations 'Wiechlice'. And as our wattage output rose into the red zone, the lunchtime picnics portrayed a plethora of lycra-clad 'MAMWILS' frolicking upon the pulchritudinous shorelines painted a glorious, yet taste specific appreciation! In the Herbarium spas along that prolifically pelagic place, we felt nothing short of monarchical, as we wallowed bodily and spiritually in those hedonistic havens. If riding 150km day after day was our stimulant, bathing in the lakes and sauna facilities was our salve for creaking joints and complaining muscles.

Upon reaching one of the world's most frequently fought over ports, Gdansk (formerly Danzig), my very personal journey was about to be bolstered by the arrival of more of the essential elements previously alluded to as catalyzing forces in my bicycling world. Stepping from the overnight ferry were two gentlemen of my own lineage, a Swedish first cousin, Gaza, and my other boyhood hero, my father Bob. Two more opposite characters would be hard to find! The old man - a life-long bike addict and inaugural Hannibalist, who is as unorthodox as he is effective - and my eldest Cuz - an infant in the cycling realm (whose only previous cycling experience was mounted upon the generic Scandinavian unisex single speed city bikes), who had only taken up the challenge of bike riding in 2015 after deciding that he too, would be a part of the inaugural Napoleon epic after

CLOCKWISE FROM TOP LEFT Peerless Palac Weichlice is arguably one of Poland's greatest palatial restorations, whose charismatic owner 'Ziggy' exudes historical and patriotic passion.

Crossing the 'Main' river into Germany, where-after riverside towns took on a fairy tale type beauty with their perfection; a bike rider's dream cycle-scape!

Happy faces in 'Red Square', Moscow - where our Napoleonic bike dream was finally realised, 45 days post departure!

Tractor Chasing in Lithuania 30 kms @ 43 kmp/h, what a buzz! 1:24 min 'Fox' clip: <http://youtu.be/BDNoBD9xF9s>.

A classic medieval courtyard dinner in the haunting grounds of Reszel Castle - overlooking the majestic Masurian lakes.



his own maiden, murderous hit out with the 'Kingsvale' night lappers - the hyper-intense and dedicated 'Cherry Capital crew'. He thereafter took to the sport like a brain surgeon, dissecting the art and applying his mind and body in ways that defied the doubters! To add to the growing fervour, was another old friend, the Colossus Willo, whose counter-wit and multi-linguistic personality, was the perfect accompaniment to the growing cacophony. We let our emotions run free upon reaching Vilnius as it was the point at which our tour diverged from the direct Napoleon route, in order to take in the beautiful Baltic and the original imperial capital of St Petersburg; dropbox snapshots tell their own story of that evening of release on the banks of the Vistula as we reached the zone of prime fitness and began the long, but now diminishing km descent with gusto!

Accompanying one's extended family on such adventures is of an unassailable eminence in my classification of cycling glory: Witnessing the birth of a brand new bike baby and his Strava progress over a gruelling six month training program was inspirational for all who bore witness, while the feeling inherent in participating with one's dad on such a journey is simply 'priceless'. An anecdote from the 2012 inaugural Hannibal, when one of English football's most decorated captains, 'Ash', referred to my old man as 'white Mr. T' when he passed him half way up a 20km ascent, best sums up such sentiments; I recall the tears of pride and laughter that

flowed that day, as the thick and furry Hull accent hilariously cursed my dad's back wheel as we pondered the phenomenon who brought me into this world and who did indeed sport a reverse B.A. Baracus (grey sides, bald top!) hair-do, quality!

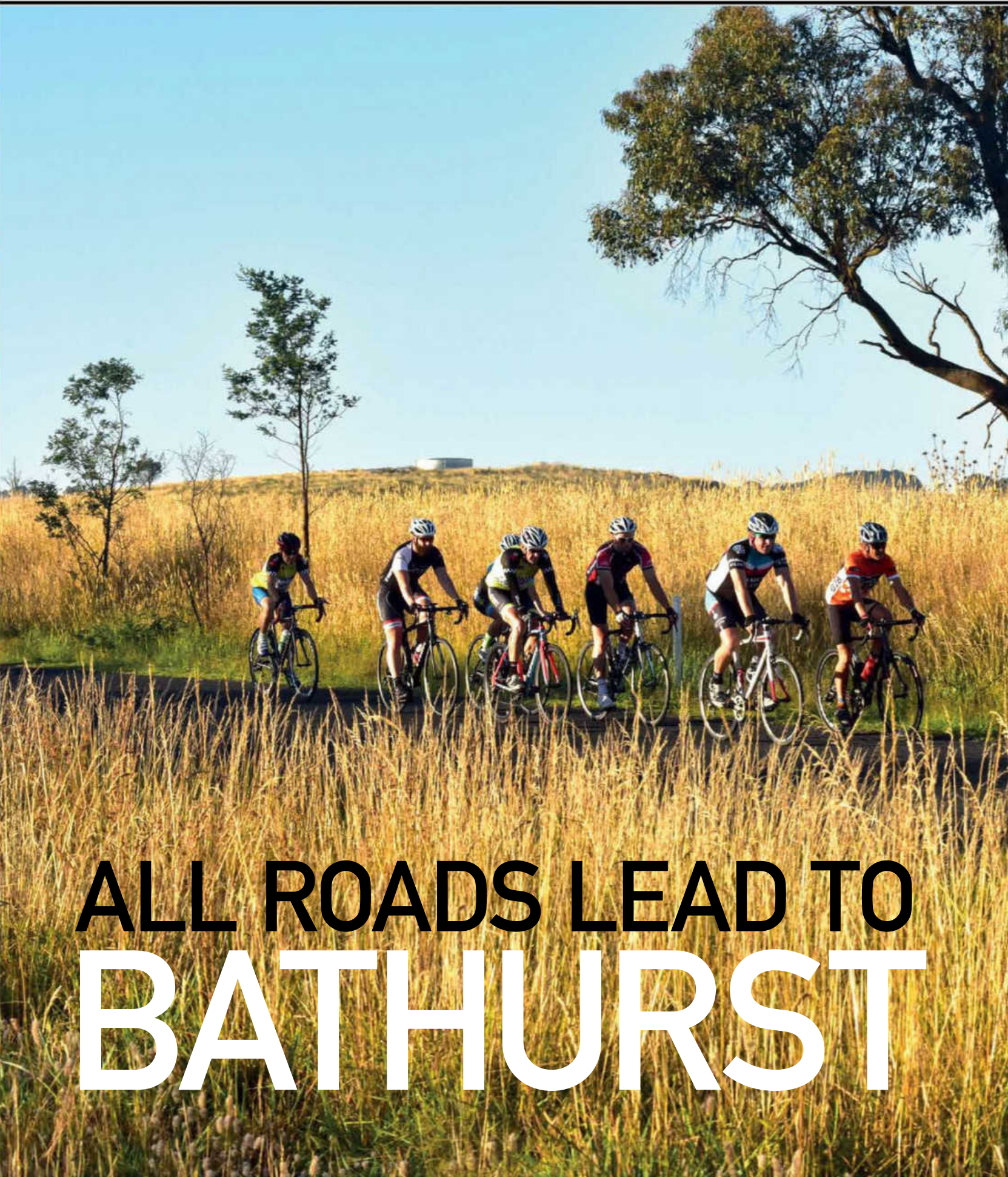
I could keep tapping away to tell of the monster 30 km Tractor chase - but it is better on YouTube, super go pro-videoing 'Fox' (for that is what he does), or of the 76 year old ex-marine who was attempting to reach Russia to donate 100 bicycles to Kenya; or the grieving mother, whose cathartic journey,

along with her amazing cycle support team won all our hearts, but such things are without description. We - who love bikes no more - are immersed in an amazing world, with amazing folk with an endless supply of the incredible stories that are shared. Our story did end, however, as hoped - sipping cocktails from the top of the world and looking out onto the Russian capital's skyline - Paris to Moscow complete; we number but in the tens but my gut feeling is that one day we will count many more!

As an enthusiast, I have lived with my bike - as a necessity mostly - for my entire life and have never forgotten why it became such a guiding force. As a father, my bike is now a tool for my offspring's, as well as my own and my partner's, enjoyment and escapism; and while we miss our families extraordinarily whilst engaging in such epic adventures, we are drawn magnetically and rhythmically to them. I hope that we will continue to replicate my father/son (strictly non-generic as my four sisters all share the same bond) cycle relationship! As a now 40 year old son, my dad and I are still proudly riding together, just as we did on the way to school some three and a half decades ago. As a brother and friend to my cycling siblings (Strava inclusive), especially the twin towers of Ride and Seek (Sam and Dylan), who have made all of the above possible, I send a huge bear hug of thanks to each and every one of you for being part of one of the greatest experiences a bike lover could wish to have! I look forward to seeing you all again, somewhere upon the riding and seeking roads of cycling bohemia!

Ciao pescao, Max;) 🍷





ALL ROADS LEAD TO BATHURST

WITH THE ICONIC BLAYNEY TO BATHURST (B2B) SET FOR APRIL 9-10, AND A BURGEONING MULTI FACETED CYCLING PRECINCT, BATHURST MAYOR GARY RUSH IS SPRUICKING THE CITY AS THE NEW CENTRE OF CYCLING IN NSW. WITH PARTNERS, KIDS AND BIKES IN TOW, WE HEADED WEST TO PUT BATHURST AS A CYCLING CENTRE TO THE TEST.

A

NEW BIKE PARK WHICH offers a competition class velodrome, MTB track and BMX track (and a criterium circuit yet to

be built); kilometres of picturesque low traffic country roads; a famous accessible car racing circuit with a solid climb which tests even home grown Tour de France rider Mark Renshaw when he's home training; cafes which welcome cyclists and serve Euro quality coffee; museums, playgrounds, well stocked bike shops, an annual race/sportif promising closed roads for the duration and a host of supporting events over what is currently a weekend but will be a week in 2017 . . . it all sounds pretty enticing for the average cycling enthusiast.

Where is this place, you might well ask? The answer is Bathurst, an inland city servicing a region of 40,000 people best known for agriculture (sheep, cattle, wheat, vegetables, honey, orchards and vineyards) and industries (education, food processing, timber and mapping).

While Bathurst is probably most famous for the Mount Panorama car racing circuit, attracting thousands of motor racing fans from around the country for the Bathurst 1000, V8 Supercars and other events, it seems there is a lot on offer for fans of wheels of the man-powered variety of vehicle as well.

Add to that the fact that Bathurst is only 2.5 hours' drive west of Sydney – easily doable after work on a Friday afternoon (as one of the locals informed us, "in the time it takes to watch a movie at the cinema"), and it's hard to ignore the Mayor's passionate invitation to "come check us out".

The ideal time, of course, is the weekend of April 9-10, when the council will for the first time run the annual Blayney to Bathurst bike race/sportif over 110km and 70km.

Gary, a keen bike rider who like superman can change from a suit and tie into lycra in a flash, is calling riders of all levels, both sexes and all ages to head for Bathurst to not only have a go at the B2B and the supporting events run by Cycling NSW, but bring their families and show them a great weekend in a city he and the council are working hard to turn into the cycling capital of NSW if not the entire nation.



Having recently opened the new velodrome and the new international standard BMX track on land adjacent to the mountain bike track which has been in use for a few months, Gary sees Bathurst as a place that bike riders are going to want to flock to.

And knowing that family support is integral to a bike rider being able to travel away to ride, he wants it to be known that there is a lot more to Bathurst as well as it being "cycling central" with a myriad of activities and attractions for non-cycling spouses and children.

The council invited Bicycling Australia to Bathurst for a couple of days to showcase the city as the ideal location for any family with a cyclist in it. The writer, a rider, took her partner, a rider, a nine year old daughter, also a keen cyclist (but also a keen kid). The photographer, a rider, took his partner, who enjoys a social ride but doesn't race, and two children, one who is keen to take up racing; the other who enjoys a social ride and many other activities.

After a couple of days of checking out attractions, eating, coffee, spending time with Gary and his council marketing/ events team, riding with the local Bathurst Cycling Club members including Tour de France rider Mark Renshaw, home before heading off to the Tour Down Under where he came second in the first state, our overall impression was awe.

Bathurst is a city well on track to become a leading cycling city – if it's not there already.

Back at the council chambers after his morning ride, out of his Lycra and dressed in a suit more befitting his Mayoral status, Gary speaks passionately about his visions for the future for the city which is Australia's oldest inland settlement.

"There is nothing like starting your work day with a ride," he says. "We love riding here and we want to show the 23 million other Australians and the world how good it is to ride around Bathurst. We want to create the facilities to breed our own future champions and bring people to Bathurst to compete at the highest level in their favorite disciplines."

Of course Bathurst is already on the world map courtesy of the Mount Panorama car racing circuit and Gary sees the Bike Park as an extension of that. Cycling events are going to feature highly on the Bathurst calendar into the future and it will be the council promoting them.

This year it has taken on promotion of the B2B, having been asked for help by Rotary and it is already thinking of 2017 when it plans to create an entire week of cycling around the main event.

"We have planned 13 major events in 2016 and three of those will deliver \$40 million into our economy – the national BMX championships, the Liquimoll 12 hour and the V8 Bathurst 1000," he says.

"Council is putting Bathurst on the map as an events centre. It is unusual for councils to take on an events management role, usually it's about roads and rubbish collection, but we have put on a full time events management team. We see Adelaide ... and I am like a kid in a lolly shop...I see it and I want it for Bathurst.

BATHURST'S BIG BIKE BASH



© NAT BROMHEAD WWW.TEAMCAR.ORG

"We have also seen the transition of Bathurst from an agricultural settlement to a railway town to a regional centre of education, with 60 plus educational institutions and eight pathways to the Higher School Certificate.

"As well as the cars and the bikes, we are also currently providing land to the local go kart club at the back of Mount Panorama to build a world class kart track."

Back to the B2B and the Council's plan for this year's event is to maintain the event, work with the volunteer labor provided by Rotary, see what it is all about, then really get moving next year on creating extra events for children, women (who may not be right into racing or the longer distance riding).

Obviously it helps cycling's cause that the Mayor is an avid bike rider. So too is the local Member of Parliament Paul Toole and the local Traffic Commander, Mick Robins.

Watch this space!

Our team were the guests of the Bathurst Regional Council. They stayed at Rydges Hotel Mount Panorama and were treated royally by the members of the Bathurst Cycling Club.

THE EVENT HISTORY

The conception of the nab B2B can be traced back to the early 1990s and the event has continued uninterrupted since then, with a series of course and format changes.

The forerunner was the Orange to Bathurst race which was created in 1990 when the two local cycling clubs at Bathurst and Orange decided it would be easier to run

a larger event if the clubs came together and shared the responsibility of running the race.

They initially ran the Orange to Bathurst as a challenge between the two clubs with a trophy to record the results, and the event quickly developed into a large regional level event.

The inaugural Orange and Bathurst Cycling Club Challenge race (the forerunner to the B2B Cyclo Sportif) was a handicap event contested in 1990 starting at Orange's Jack Brabham Park and finishing on the outskirts of Bathurst on the Old Vale Road Motor Racing Circuit.

Cycle Racing between Orange and Bathurst had been contested for 100 years but the new club challenge format continued to drawing stronger more widespread field each year in the 1990s. After Mark Renshaw won and recorded fastest time in the event in 1999 (he also recorded Fastest Time in 1997) the event administration team upgraded the format and CNSW sanctioning by inviting Sydney clubs for a city vs country challenge.

Using the same course and the handicap system the event continued to grow attracting Cycling Australia which joined the event with Rotary in 2004 for first Cyclo Sportif event (with the day promoted as the O2B). The initial Cyclo Sportif division was run as a separate event behind the handicapped race event. The organisers realised the format required massive changes to grow further so the event moved to a scratch race format and a series of course changes occurred.

The 2005 was the first CNSW "Blayney to Bathurst" (B2B) starting at Blayney

WHAT: The 70km/110km 2016 'nab Blayney to Bathurst' (B2B) Cyclo Sportif Challenge and the 110km B2B gold race. The race ends at the famous Mount Panorama Racing Circuit, with a carnival atmosphere.

WHO: Rotary Club of Bathurst Daybreak Inc/Bathurst Regional Council/Cycling NSW run the sportif event for riders in categories including junior men and women 19, under 23 men, elite men and women, masters men and women, Cycling Australia RIDE members, Audax members. The sportif is open to the general public and caters for all riders with suitable fitness to complete the distance. Riders without a current member of Cycling Australia will receive a 3 Month Ride membership which includes necessary insurance cover. The gold race is for Race for national and state A grade male riders and high level female riders. Riders can enter as a team or an individual. There is also an 11km Family Challenge Event.

WHY: Challenge yourself, ride the distance, ride it for a time, ride with friends, enjoy the scenery and all that Bathurst has to offer

WHEN: Sunday April 10 2016

WHAT: The B2B Cyclo Sportif is a participation event that caters to all riders with suitable fitness to complete the distances.

WHERE: Carrington Park, Blayney NSW
8.30am 110km long course gold race
8.45am 110km long course cyclo sportif
10.15am 70km short course cyclo sportif

HOW: Go to www.nsw.cycling.org.au for more information and online entry. Entry is \$117 per rider

EXTRA INFO: Supporting events: NSW Hill Climb Championships, Bathurst Criterium Races April 9. See www.nsw.cycling.org.au for details and online entry.



TOP LEFT: The famous Bathurst Mount Panorama racing precinct is set to become a major cycling destination as well, with a new velodrome, BMX track, MTB track and a criterium track planned.

TOP RIGHT: Our rider Matthew Somerfield (third from left with local NSWIS rider Kirsten Howard) takes on the Blayney to Bathurst 70km route with a bunch of locals.

RIGHT: Local cafe The Hub is a regular haunt for riders pre and post ride - and the coffee warrants a return visit.



LEFT TO RIGHT: The scenery on the B2B route is breathtaking.

The coffee available in Bathurst is city quality or better.

We started the B2B reccie early to avoid the heat of the day and enjoyed a stunning sunrise and traffic free roads.

HOW TO GET TO BATHURST

- **BY CAR:** Bathurst is 207km from Sydney, 251km from Canberra and 191km from Goulburn
- **BY AIR:** Regional Express flies daily between Bathurst and Sydney
- **BY COACH:** Australia Wide Coaches has daily services to Sydney
- **By Rail:** NSW trains run a daily express service between Sydney and Bathurst; while there is a Daily XPT service to and from Sydney.
- Getting around once you are in Bathurst can be done by personal car, Bathurst Taxis or the local bus service.
- Recommended, once you arrive, buy yourself a C Bathurst pass, which gives you access to a variety of attractions including the Australian Fossil and Mineral Museum, the National Motor Racing Museum, the Bathurst District Historical Society Museum, Chifley Home, Bathurst Regional Art Gallery. The pass is available from any of the attractions or the Bathurst Visitor Information Centre 1 Kendall Ave.

and actually finishing at Perthville again with a separate Ride-it Category. In 2006 the course changed to finishing at the top of Mt Panorama but this event as very significant as the current format was established using timed results and a Long and Short Course option.

THE RIDES

1. BLAYNEY – BATHURST 70KM. MATTHEW SOMERFIELD, SYDNEY.

Blayney to Bathurst is a point to point ride starting from the local swimming pool in the rural township of Blayney and continuing to the finish behind the car racing facilities at Mount Panorama. I haven't done the B2B event before but after doing the reccie, I will definitely be going back in April to ride with my mates and see what time I can get for the distance.

I rode the 70km route with Mark Windsor, a local rider who turned out to be a wealth of knowledge on the B2B, with a large bunch of Bathurst cycling club members who apparently ride the route quite regularly. There is also a 110km route.

Leaving Blayney, a small country village with a significant swimming pool complex and its own council you find yourself riding along wide country roads surrounded by paddocks full of grazing cattle and sheep, and river plains. The ride moves into rolling hills moving into Barry, a sister town to Neville, known as solid farming villages follows Coombing Creek to Hobbys Yards, where the short course and long course of the B2B event split. The long course heads to Trunkey Creek, an old gold prospecting site, while the short course continues past the Three Brothers range.



You then progress through Moorilda towards Newbridge where rolling hills begin. Mark reckons people get a bit anxious here anticipating the King of the Mountain coming up.

From the top of the hill it is a nice run into Bathurst. At Wimbledon you start dropping down off the plateau, looking down on the beautiful Bathurst Valley and Charlottes Vale where William Cox, Governor Macquarie and surveyor George Evans were so impressed that they opened up inland Australia there 200 years ago.

Down on the flats the two courses come together and you ride along Georges Plains on roads with a huge cycling history. Mount Panorama is on one side; the new bike park with a BMX, MTB and velodrome on the other.

A couple of kays later you ride into Mount Panorama for the finish; you touch the race circuit a few times and finish in the pitts.

It is a challenging ride for a club cyclist especially coming from Sydney (where we mostly ride criteriums) due to the dead road surface and undulating terrain, but I would absolutely recommend it.

What I enjoyed most was the scenery along the way, the clean fresh air and the freedom of riding country roads safely—and even a few warm waves from local farmers. Unspoiled land, livestock stations with grazing sheep and cattle, the railway which you follow past Newbridge for quite a few kilometres, and the historic landmarks typical of Australia's country towns make the ride all the more special.

70km doesn't sound much, but it is actually a solid two hour ride, averaging 31kmh, even in a large bunch like the group of locals I rode with. My Garmin registered



633 metres of altitude gain and I was told that the 70km ride can be tougher the 110km option you can do on the day of the sportif, due to the 70km having more hills.

I can't wait to return to Bathurst in April and do my first official B2B.

2. MOUNT PANORAMA LAP – 6KM MATHEW SOMERFIELD, SYDNEY

I had been to Bathurst to watch the car racing and the idea of riding my bike around Mount Panorama was very attractive, even though I hadn't done much training especially on hills in the weeks leading to our trip. I was very fortunate to be escorted around the circuit on my bike by local Tour de France rider Mark Renshaw. I really enjoyed this ride. The scenery is breathtaking and it is totally worth the hard pedal to the top of the mountain. Mark does up to eight laps of the circuit to do hill training, but I was happy with one!

We averaged just 20.8kmh for the six kilometre circuit and I can tell you that it was tough and I can certainly see the training benefits of getting on there regularly.

I think it is a must do for any riders who visit Bathurst but you need to have a bit of fitness under your belt to be able to make it up the hill with any kind of pace on.

The descent was tight and fun, even at the 60kmh speed limit. It's a residential two way street when not in use for racing.

3. 30KM BATHURST TO NEWBRIDGE AND RETURN KAREN FORMAN, ILLAWARRA

Local rider Gary Rush (who happens also to be the city Mayor) led me on an easy ride with him and a few mates leaving at

7.30am on a weekday morning before the predicted heat wave conditions kicked in. Just recovering from an injury, I wanted to ride on the flats, at a fast enough pace to get my heart rate up, and enjoy some Bathurst scenery, while protecting my injured ankle.

We started the ride at the Dog Pound, headed out Vale Rd and quickly moved out of town towards Perthville which is a really pretty little town with a pub that supports the local cycle club, then onto Goulburn Rd to Georges Plains to Newbridge and return, getting 30km done in just over an hour.

The road surface was typical country road, not too bumpy but heavier than what we are used to in the city where hot mix surfaces are common, but the scenery was breathtaking. I enjoyed the mostly flat terrain, with some false flats. Gary says any number of local groups are going out every day along this route and they welcome visitors.

At that time of the day we didn't strike much traffic and the drivers did give us a wide berth. We met the B2B route riders on the way back and jumped onto them for the last 10km for a fast downhill cruise into town.

We saw a number of other groups training along the way and in true country style, there was always a chorus of "good mornings" as we passed.

4. THE RIVER RIDE 19KM

KAREN FORMAN AND EVA WALESIAK WITH GABI 9, CORALINE 14 AND YANNICK 12

KAREN: This is a great ride for the whole family to enjoy together on any kind of bikes, although we all had road bikes.

It is mostly on a bike path which follows the Macquarie River and averaging 15kmh to suit the kids it took us just over an hour. The well-

If you arrive in Bathurst and found you have forgotten something for your ride, then the man to see is Greg Bell. If you arrive in Bathurst and need to know something about cycling in the city – especially the B2B event, then the man to see is Greg Bell.

Greg, or Belly as he is affectionately known in cycling circles around town, is the man behind Belly's Bikes, one of two bike shops in the town currently working out how to respond to the increase demand for track bikes, mountain bikes and BMX bikes following the construction of the new Bathurst Bike Park which takes in all three disciplines of riding.

He not only sells the gear, but has the experience and knowledge to tell you what to do with it when you buy it. We arrived in a flurry after our junior rider realised she had forgotten her helmet and shoes. Within minutes, Belly had her fitted out in a pair of Shimanos in her size, had bolted on new cleats and helped her choose a helmet that perfectly matched her club kit. She left there talking about Belly like an old friend.

Enter the shop, though, and Belly is not the first one you will meet. First there is Bella, his beloved one year old British bulldog, who comes to work with her Dad every day and rides around in a trailer behind his bike.

While Belly himself reckons he is "nothing special; just a bloke who helps people ride bikes and loves to ride", the local cycling grapevine thinks otherwise. He's an avid supporter of the local cycling club and riders and with his trademark grin is always up for a chat when you visit his store. And, he has done the B2B event every year since its inception in its current format 12 years ago.

A mechanic by trade, he started riding bikes himself in 1998 when a marriage breakdown meant he had more time to exercise and a leg injury required him to do some non-weight bearing exercise.

His first event aged 35 was the RTA Big Ride from Canowindra to Bega via the Victoria Snowy Mountains, which he did on an MTB with just two months to get fit. He followed up with a two week 1,400km journey from Thredbo to Sydney and realised he needed a road bike...then began a decade of spending his annual holidays riding a bike over long distances.

From there he got into mountain biking and started competing in endurance events, doing a lot of road kays to mix up the training and shifting his work focus from cars to bikes working as a bike mechanic in a bike shop.

He has been a member of Bathurst Cycling Club for 10 years. In 2015 he decided to forge out on his own, buying a rundown former firearms/pets/bike shop and turning it into the modern large bike shop it is today.

Belly says he is excited about the new Bike Park in Bathurst and has seen a new interest in BMX, track and mountain biking since it opened.

He's hoping to get enough time away from the shop to get some training in for what will be his 12th B2B, an event he says is "unreal, great for Bathurst and riders from everywhere".

STATE OF THE ART FACILITIES

Just outside of Bathurst on Vale Rd at Mount Panorama, stands the Bathurst Bike Park, an amazing facility which the local council hopes will position the city as the centre of all things cycling in the State if not the entire country.

Funded by State, Federal and Local Government funds, as well as input from user groups, the bike park brings together three cycling disciplines – track cycling, mountain biking and BMX – offering world class facilities designed to provide opportunities for local juniors and adults, but also attract major events which will bring people to the city. A criterium track is expected to go in sometime in the next 12 months to provide for some road racing as well.

Chairman of the Bathurst Bike Park Steering Committee, Mark Windsor, says the park is something cyclists in Bathurst have been trying to get up and running for 130 years – and now it has happened.

"I believe we have world champions walking around this Central West area, we have so many good bike riders."

At the bottom of the property is the new velodrome, home of the Bathurst Cycling Club. It is a 333 metre round bitumen track with banking ranging from 10 degrees to 20 degrees in the bends. There is a \$250,000 clubhouse which is shared with the BMX and the mountain bike groups, offering canteen, toilet, storage and meeting facilities along with a wide shady veranda.

Club coach Marian Renshaw says the club is delighted with the new track which is fast and smooth. It was officially opened at the Bathurst 200 track carnival/NSW Country Track Championships held late last year held as part of the Bathurst 200 years celebrations.

"The 333 metre track is UCI standard so we could hold Olympics here if we wanted," she says with a smile.

Currently the club is catering for riders from three and four year olds through their mums, elite riders and masters.

It races every Friday night with training held most days and a new women's contingent was planning an assault on the NSW Masters state track championships in Sydney in February

Up the hill and indeed, cut into the hillside, is the brand new BMX facility. It is state of the art, able to host major international championship events such as the Subaru BMX Nationals held February 29-March 6 is one of only two cities in Australia with a BMX track of world class standard. Boasting two start ramps of eight metres and five metres, it is 400 square metres.

Further up the hill finds the entrance to the mountain bike park, Bathurst Mountain Bike Club President Glen Porter says the track has been in existence for three years, but was born out of the idea that all cycling disciplines could be hosted on the one site.

The Bathurst local was on a mountain biking holiday in New Zealand with his family when he read an online newspaper article from back home announcing the Bathurst Cycling Club had set up an MTB branch and had been offered a large patch of land by Council to create a track. "The club had the sense to align with the MTBA, so I came back from NZ and got involved. We had an International Mountain Bike Association trail building workshop here to teach us how to build trails properly using the natural terrain.

Now the BCC has 350 members; many of whom MTB as well, with ages from eight to 65, a 13km hand built trail which is mostly single track with a tight switchback, some berms, jump lines and wooden fences. It holds club racing each Wednesday night for all ages and runs an EVO Cities event (Australia's richest MTB Series across seven races).

marked bike way starts at Ophir Rd Eglinton, where there is plenty of parking and you ride east 9km to Bicentennial River Park. We only had to venture onto the road in Morrisett St, but traffic was sparse and soon we were back on the relatively new paths, enjoying the historic river precinct. The kids were able to ride ahead safely and the path is wide enough to ride two abreast. I almost laughed... there are Strava segments along this route!

EVA: 'I am an occasional rider keen to get more involved in the sport. Originally from Poland and having moved to Australia five years ago, I feel limited with family-friendly cycling options near my home on Sydney's Northern Beaches. I don't ride on local roads in Sydney because it's too dangerous for myself and the kids. The river loop near Bathurst reminded me of cycleways in my home city of Warsaw. A lot of people commute to work along a path that follows our river, the Wisla, riding the path was a very safe and similar experience. Everywhere in Warsaw you can ride a bike safely – it would be a dream if we had this amount of paths in Australia.

YANNICK: I was thrilled about getting out on the family river ride. My highlights were the safety, scenery, spending time with family and friends and riding on car-free roads. I also loved the look of the BMX track and velodrome. I would love to go back and ride there again soon.

GABI: I enjoyed riding with my mum and my friends on the bike path. I didn't have to stress about cars and Yannick and I rode next to each other, sometimes a bit faster

BOTTOM LEFT: The 13km MTB track features some sweet single track and fun berms suitable for riders from beginner to advanced.

BOTTOM RIGHT: Bathurst's new BMX track is international standard, featuring 10m and 5m ramps against a stunning landscape.

OPPOSITE PAGE: Sydney Mum Eva Walesiak ready for a ride with the kids on Bathurst's family friendly riverside bike path.



than the mums which was great. They didn't mind us going ahead because they knew there would be no cars.

THE ITINERARY

The two families only had two nights and two days in Bathurst, but managed to see and do a lot – including the all-important B2B ride – during our stay. Here is a suggested itinerary for mum, dad and the kids.

DAY ONE: Arrive in Bathurst and check in to one of the many motels, hotels, caravan parks. We stayed in spacious two bedroom apartments at Rydges Mount Panorama with views of the famous track and the plains beyond. It is worth mentioning that Rydges requires a two night stay over major weekends like the B2B. Sunrise was particularly spectacular out of the glass doors and across the balcony. Having two bathrooms was a treat with kids in tow and although we were out enjoying the local restaurants and cafes most of the time, the full sized kitchen with laundry provided for some self-catering.

Dinner at The George Hotel, a boutique pub overlooking Machattie Park with a casual feel, perfect for families but a menu that would rival many a city establishment. We dined on lemon and rosemary marinated chicken breast with basil gnocchi, grilled peaches, baby spinach, prosciutto with wine sauce \$28, chargrilled ribeye 300gm café de Paris butter, shoestring fries and a fire herb and water cress salad.

DAY TWO: Do the B2B, either on the official event day, or on your own on another date. Our rider was driven to Blayney to meet Bathurst Cycle Club locals for the 70km ride to Bathurst, following the same course that will be used in the official race/sportif in April. With a hot day predicted, the ride began at 6.30am.

Meanwhile, his partner was driven to the Bathurst Dog Pound to meet local rider Gary Rush (the Mayor) and some friends to ride a popular 30km out and back course to Newbridge at an easier pace. Coffee after both rides was at The Hub, a cyclist friendly café with a huge outdoor area covered with umbrellas, great coffee and plenty of bike parking. We enjoyed bacon and egg rolls on Turkish bread (a gluten free option was available).

Lunch back at The Hub. We enjoyed a kids BLT \$6 and two quirky, but nutritious salads. We couldn't decide whether we preferred the lemon and garlic chicken with kale, quinoa, red onion, capsicum, avocado, carrots, almonds, currents, mint, mixed leaves with citrus dressing more than the warm sweet potato salad with haloumi, walnuts, spinach, apple and balsamic dressing with chicken,



[["Nobody braved the saltwater croc pizza with wild lime and ginger marinade, coconut cream, baby spinach, Spanish onion and roast capsicum . . . but we are sure it would have been nice."]]

lemongrass, ginger and cranberry iced tea.

The afternoon is a great time to check out some of the local facilities. We toured the new BMX track, watched some track training with the juniors at the velodrome under the guidance of Coach Marian Renshaw (if you recognise the name, yes she is Mark's mum) and returned to watch the local club run its weekly racing at the mountain bike circuit. All welcome, so take your mountain bike along.

Dinner at The Church Bar. As the name suggests, the venue was once a church and has been tastefully converted into an Italian pizzeria. We sat outside as the evening cooled and enjoyed an array of gluten free, vegetarian and traditional pizzas. We loved the Rankin, which featured salami, mushrooms, buffalo mozzarella and some rocket on request. The Havana with Tandoori chicken, mint yoghurt, Spanish onion, cashews and coriander was also a winner. Nobody braved the saltwater croc pizza with wild lime and ginger marinade, coconut cream, baby spinach, Spanish onion and roast capsicum . . . but we are sure it would have been nice. The prices were all reasonable at around \$20 per pizza.

DAY THREE: Up early, greet the sunrise and ride a lap of Mount Panorama. It's 6km around and involves a steep climb (and then descent, but as it is a street circuit, speed limits of 60kmh apply). If you are fit enough, do two or more laps, but be sure to stop at the top and take some photos of the view, which is particularly spectacular at sunrise.

Be sure to drop into the Al Dente pop up cyclist staff on Vale Road (only on Thursdays) where you can buy a bacon and egg roll.

This is the ideal time to take your non racing spouse and children on a gentle family ride along the Macquarie River. It's bike path most of the way; an easy 19km with plenty of places to stop for a drink and a snack along the way. The ride starts at Ophir Rd, just 10 mins out of the main city and there is plenty of room for car parking.

With plenty of riding under our belts, the afternoon is the perfect time to explore some of the local attractions. The National Motor Racing Museum at Mount Panorama features a large collection of historic cars and motorcycles and with videos and photographs well illustrates the history of motor racing in Bathurst. The souvenir shop is difficult to pass by.

And a museum not to be missed is the Fossil and Mineral Museum in Howick St, featuring the Somerville Collection – and the only life sized T-Rex skeleton in Australia. Housed in a former historic schoolhouse built in 1876, the collection – which comprises half of a private collection owned by an Orange man, Warren Somerville, is magnificently displayed. Even non museum fans are sure to be fascinated with a visit.

It's almost time to head home, but not before giving the kids a run in the adventure playground featuring dinosaurs and loads of green space, and a taste of the locally churned ice cream at Annie's Ice Cream.

We headed home with a hunger to return, do it all over again, take in some more rides and check out the myriad of other attractions including former Cobb & Co trails, have a BBQ at Chifley Dam, visit Abercrombie House, Chifley Home and Miss Traill's House and garden, ride the miniature trains and more. 🍷

100th Tour of Flanders

BY PETER MANIATY



Tom Boonen has triumphed three times in Flanders. His most recent win came in 2012 and was the last time a Belgian won the race.

RONDE & RONDE

FOR BELGIANS IT'S MORE PRESTIGIOUS THAN THE TOUR DE FRANCE. BUT AS THE RONDE VAN VLAANDEREN CELEBRATES ITS CENTENARY EDITION THIS APRIL, IT'S WORTH REMEMBERING THE ICONIC RACE OWES MUCH TO LE TOUR, AND SPECIFICALLY THE 1912 RACE.



FORGET THE FIRST TUESDAY in November. On the fourteenth Sunday of the year there is a race that truly stops a nation. That nation is Belgium. The race is the Ronde Van Vlaanderen, otherwise known as the Tour of Flanders. It's the youngest of cycling's five Monuments and arguably the most brutal day in world cycling.

Understanding the history of the Tour of Flanders is to understand the history of the Flanders region itself for the two are deeply intertwined. More than a mere bike race, it provides the cobbled canvas for an annual spring celebration of all things Flemish, a day that truly transcends cycling and, rich in cultural symbolism, holds a treasured place in the hearts of the Flemish people.

THE WINNERS

Since day one Belgium has dominated the honour roll. The host nation's riders have stood atop the podium on no fewer than 68 occasions. However in more recent times the trend has eased somewhat with Belgians claiming just two of the past six races. The most recent local winner came in 2012 with Tom Boonen, one of six men to share the record for victories with three apiece. The others are Boonen's countrymen Achiel Buysse, Eric Leman and Johan Museeuw, Italy's Fiorenzo Magni and Switzerland's Fabian Cancellara. Eddie Merckx won the Ronde twice.

With the top French and Italian teams bypassing the Ronde in the early years, it was 1923 before the race welcomed its first non-Belgian winner, Switzerland's Henri Suter, and considerably longer before it

[[In 1984 only two riders – Phil Anderson and Jan Raas – made it to the top of Koppenberg still on their bikes.]]

had another. In fact from 1924 to 1946 every step on every podium was occupied by a Belgian – all 69 places – and of the first 32 races Belgians won all but one. Things changed emphatically, however, in 1949 when Italian hard man Fiorenzo Magni made his own history on the way to winning the next three years in a row. While hundreds have tried, only one winner (depending on your geographical view of Norway) has come from outside of



mainland Europe: England's Tom Simpson in 1961. Irish legend Sean Kelly once said his failure to win in Flanders was the biggest disappointment of his glittering career, having finished second three times in just four years between 1984 and 1987. As part of his ongoing torture Kelly is now forced to commentate on the race for Eurosport each year.

THE HISTORY

It may be hard to fathom nowadays, but at the start of the 20th century Belgian cycling was in the doldrums. Velodromes were closing and at one point the national

Belgian newspaper, Het Nieuwsblad.

The first issue of Sportwereld was published in September 1912. Not long afterwards a proud 30-year old Flandrien cycling writer became its editor. His real name was Carolus Ludovicus Steyaert, but he is best known by his pseudonym: Karel van Wijnendaele. Beyond a deep passion for cycling van Wijnendaele brought a dream of creating a one-day race staged entirely on Flemish soil and, perhaps even more importantly, the determination to see it realised. Working alongside fellow Flandrien Léon Van den Haute, one of the co-founders of Sportwereld, van Wijnendaele oversaw the first ever staging of the Tour of Flanders less than a year after Defraye's victory in France.

The inaugural race rolled out on 25 May 1913 in the historic Flemish city of Ghent and finished, some 330km later, on a wooden velodrome in nearby Mariakerke. A far cry from today's UCI World Tour, a mere 37 riders started and the winner, 25-year old Belgian Paul Deman, greeted the judge a little over 12 hours later. Deman's prize was 500 Belgian Francs. 2015 winner Alexander Kristoff took home €20,000 (AUD\$30,500).

Deman's 1913 win ensured his place in cycling history. He would go on to win another of cycling's Monuments, Paris-Roubaix, in 1920. However his career very nearly ended at the hands of the Germans



© TIM DE WAELE

THE AUSTRALIANS

Australians have claimed many of the world's most prestigious races in the last decade including three of the five Monuments. But as yet no Australian has prevailed at the Tour of Flanders. Mind you, we've come mighty close.

The trail-blazing Victorian Phil Anderson finished second twice; 41 seconds behind Eric Vanderaerden in 1985 before losing a two-man sprint in 1988 against Eddy Planckaert, who went on to easily secure the Green Jersey at the Tour de France in the same season. Stuart O'Grady finished third in 2003, while Heinrich Haussler was also on the podium in 2009, placing second behind Stijn Devolder – however technically that doesn't count as the Inverell-born rider was competing under a German licence at the time. Haussler returned to Flanders with an Australian licence in 2013 and placed sixth.

Looking towards the future, Orica-GreenEDGE neo-pro Alex Edmondson won last year's U23 race riding for the Team Jayco-AIS World Tour Academy team. The best placed Australian in the main race in 2015 was again Heinrich Haussler who finished 26th.

in WWI when, after joining the Belgian underground war effort, he was captured and held for execution. Fortunately the 1918 Armistice arrived before the bullet.

The outbreak of WWI saw the Ronde take an enforced hiatus after only two editions, with much of the region affected directly by the war, especially near Ypres in West Flanders. A substitute race of sorts was held in August 1915 with riders completing a dizzying 150km around a timber velodrome in Evergem, close to the Dutch border. However by the following year the track had been ripped up and the Ronde wouldn't be seen again until 1919 when the third official version of the race was won convincingly by Henri van Lerberghe, an

ex-soldier who rather poetically finished second in the previous edition back in 1914.

Unlike during WWI, the Ronde continued uninterrupted during WWII. Reportedly the Germans not only allowed the race but even helped police the route. Some suggest this was because Karel van Wijnendaele collaborated with the Nazis. However others believe the Germans strategically used the race to exacerbate historic tensions between the Flemish and Walloon people; tensions that still exist today.

TOP LEFT: Fabian Cancellara went back-to-back in 2013 and 2014, but was absent in 2015 after a serious crash at E3 Harelbeke.

TOP right: Massive crowds line the roads and the marshalling area.

BELOW: Crowds gather early around Grote Markt (Market Square) in Bruges for the mid-morning race start.





© TIM DE WAELE



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© EAMON FITZPATRICK

CLOCKWISE FROM TOP: It's not all cobbles and hills.

Cobbled climbs, or hellingen, have become synonymous with the Ronde since the 1980s.

Neutral support has come a long way!

One manifestation of this tension can be seen flying proudly by the roadside every year. For many, the yellow and black Lion of Flanders flag is a source of tremendous regional pride. But for others it's an ongoing symbol of antagonism and conflict. One seemingly subtle variation of the flag features an entirely black lion (that is, without the red claws and tongue) and is commonly associated with Flemish separatism. Waving this by the roadside may draw a polarising response from onlookers, so be careful.

Tensions or otherwise, by the end of the 1920s the Ronde had cast aside early growing pains to become one of the highest points on the Flandrien calendar. Masses of spectators crammed along roadsides turning the race into an epic cultural festival that, nearly a century later, shows no sign of abating. Writing for PEZ Cycling News in the lead up to the 2014 race, Edmond Hood explained,

"the population of Flanders is around six million; when I checked the race stats a year or two ago, the organisers expected 800,000 roadside – assuming that 50,000 were foreign spectators – that's 12.5 % or one eighth of an entire nation standing beside the road." To put this in perspective, imagine three million Australians turning up to watch a single live sports event.

THE COURSE

As with the Ronde's older sibling, Paris-Roubaix, the cobbles of Flanders have long provided a crucible for high drama, universally loved by fans and dreaded by most in the peloton. Throw in the added pitfalls of steep, uneven and often wet climbs and it's little wonder only the toughest riders prevail.

The route has evolved considerably over the years. But it's always been run in the provinces of East and West

Flanders. After starting and ending in (or near) Ghent for more than six decades, nowadays the race begins 50km to the north-west in Bruges. Excited crowds gather early at the pubs and cafes around the main square, and swell until the official mid-morning race start.

The finish was moved away from Ghent for the first time in 1973, replaced by Meerbeke near the Belgian capital, Brussels. The introduction of Meerbeke allowed organisers to include several new cobbled climbs, or hellingen, that are now synonymous with the race. Curiously it wasn't until the 1980s that the number of climbs reached double-figures for the first time.

Without question the most revered climb in the Ronde's 103-year history is one that no longer features in the race: the Muur van Geraardsbergen, also known as the Kapelmuur or simply the Muur. It's steep.

SL

WORTH *THE* WEIGHT

At a staggering raw frame weight of just 695 grams, the SL is 19% lighter than any bike Fuji's ever produced and is flat-out one of the lightest bikes in the world.



Not only is the SL significantly lighter, it's significantly stiffer: 9% stiffer in the head tube, 11% stiffer in the bottom bracket, and 18% stiffer in the fork (than the Altamira) for maximum efficiency and superior handling.





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It's narrow. It's cobbled. After 1,075m at 9%+ it finishes adjacent to what is surely the most recognisable chapel (kapel in Dutch, hence 'Kapelmuur') in world cycling. The Muur first featured in 1950 and between 1988 and 2011 it was the penultimate and often decisive climb. But when Meerbeke disappeared from the race in 2012, so did the Muur.

In 2011 the race had new organisers, Flanders Classics, who controversially moved the 2012 finish to the town of Oudenaarde where it will stay until at least 2018. Not without some irony Oudenaarde was once strongly opposed to the idea of the Ronde Van Vlaanderen. Back in 1913

the town's leaders even refused to allow the race passage, before demanding the peloton at least be neutralised as it passed through. Today the situation could hardly be more different. The town is even home of the official Tour of Flanders Museum.

The move to Oudenaarde was, of course, driven primarily by money with organisers arguing the new finishing circuits would be more spectator friendly and therefore more lucrative for sponsors. Unfortunately the change also necessitated the removal of the Muur and nowadays the final two climbs are the Oude Kwaremont (2.2km, 4.2% av) and Paterberg (440m, 12.5% av).

Another of the Ronde's most famous climbs is the Koppenberg (600m, 11% av). It too has courted controversy over the years. In treacherous weather its slippery stones have proven virtually unrideable at times. Falls are almost inevitable as is the chaos that follows, sentencing much of the peloton to the ignominy of walking their bikes to the top. Bernard Hinault famously commented, "It's hard to explain what the Koppenberg means to a racing cyclist. Instead of being a race, it's a lottery. Only the first five or six riders have any chance: the rest fall off or scramble up as best they can."

In 1984 only two riders – Phil Anderson and Jan Raas – made it to the top of Koppenberg still on their bikes. While in 1987 the solo race leader, Jesper Skibby, fell on the cobbles and only narrowly avoided being crushed by an official car as it drove straight over his bike! (tinyurl.com/z4n5clz). The Koppenberg was subsequently banned from the race and only re-emerged in 2002 after its surface has been repaired. It was briefly dropped again in 2007 but was reinstated in 2008. The bulk of the official race convoy is now diverted before the climb to avoid any such repeat of 1987. In the 2015 race, surprisingly dry by Flanders standards, a deflating banner posed the greatest threat to riders on the approach to the Koppenberg.

This year's Ronde is set down for Sunday 3 April 2016. 🍷

ABOVE: Course changes saw the legendary Muur van Geraardsbergen, or Kapelmuur, disappear from the race in 2012.

RIGHT: There's always a pub close by steeped in cycling history and paraphernalia for one of the local brews and a plateful of frites and mayonnaise.



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As we go to print
Trevorrows baby,
the Sun Tour is
getting underway,
including TDU
champion Chris
Froome.

IFFY

JOHN TREVORROW HAS ENJOYED A LIFE-LONG LOVE AFFAIR WITH CYCLING, INCLUDING A STORIED CAREER ON AND OFF THE BIKE. THE FORMER AUSTRALIAN CHAMPION AND CURRENT HERALD SUN TOUR RACE DIRECTOR SPOKE WITH KIERAN PENDER.

JOHN TREVORROW IS A man of stories and smiles. While his sun-worn face betrays the effect of many years in the saddle, five

decades in the cycling industry have not diminished Trevorrow's love for the road, nor his warm and affable personality.

To Gerry Ryan, the financier of much recent Australian cycling success, Trevorrow is the sport's "unsung hero". As Orica-GreenEDGE owner, Ryan told the Herald Sun last year, "You can see his passion ... Cycling thanks him for it."

Ryan and Trevorrow, together with Daryl Herbert and David Ferrier, have teamed up to create GTR Events, in what may prove the most important development for domestic cycling in recent years. With responsibility for delivering a raft of high profile races across the National Road Series and summer of cycling, GTR Events will play an influential role in shaping the future of road racing in this country. Lucky, then, that the highly experienced Trevorrow is at the helm.

Now 66, the vertically-challenged Victorian has long had cycling in his blood. Brought up on tales of racing glory, Trevorrow would go on to build a professional career with successes at home and abroad.

"My father used to race," he explains. "When I was a little kid in the early 1950s, the Sun Tour riders would stay at my house when it came down to Gippsland. I would listen to their stories – I was always going to be a bike rider."

Trevorrow got his first taste for elite racing as a 21-year-old, selected in the Australian team for the 1970 Commonwealth Games in Edinburgh, Scotland. The young rider finished third to complete an Antipodean podium, with compatriot Ray Bilney beaten to gold by New Zealander Bruce Biddle.

"The Commonwealth Games was my first trip away," Trevorrow recalls. "Back then young Australians did not travel much. I came from a country town, Morwell, and I remember the town being really excited – not because I was

[[Cadel was going so fast up Mount Wellington during a stage that Phil said he could win the Tour de France one day. Phil still dines out on that of course!"]]

going to the Games, but just because I was going overseas!"

Two years later Trevorrow was back in national colours for another European visit, this time to the Olympic Games in Munich, Germany. While Trevorrow helped teammate Clyde Sefton to silver in the road race, his memories of the time are dominated by the birth of his daughter and the tragic terrorist attack.

"Of course competing at the Olympics was very special," says Trevorrow. "But my wife was pregnant, and the night of the terrorist attack was also the night my daughter was born. All communications were cut, so I did not find out until a few days later that I had become a father."

The attack, by Palestinian group Black September, saw athletes and coaches from the Israeli team held hostage. Eleven Israelis and one West German police officer lost their lives, along with five of the terrorists.

"We had woken up that morning thinking we would be contesting the road race, only to find out there had been a terrorist attack," Trevorrow continues. "I remember thinking, 'what's a terrorist?' There had never been anything like that. The Israelis were staying nearby, so we saw the terrorists and hostages get out to the helicopters. It was terrifying stuff, and put a real down on the Games."

Ever chirpy, the tone of the conversation

quickly changes as he remembers an enjoyable visit to Mexico later in 1972.

Discussions with Trevorrow are inevitably sprinkled with numerous amusing anecdotes – from hitting Eddy Merckx with a video camera in Mexico City to being mistaken for the team mechanic.

"We were in Puerto Vallarta after the Olympics to race the Tour of Mexico," he explains. "I am laying out on a lilo in the pool with a stubbie and a cigar when the Italian team arrive. They start chatting with the boys, and one of them says: 'Your mechanic, he has a good time!' Clyde replies: 'That's not our mechanic.'"

Despite this love of leisure, Trevorrow turned professional the following year. He won the 1974 Sun Tour, and later added two more Sun Tour titles to his palmares. Now the event's race director, Trevorrow describes this unique combination as "very rewarding".

Trevorrow spent the remainder of the decade racing in Australia and Europe, interrupted by a temporary retirement at the end of 1973. Three consecutive national road championship victories from 1978-1980 put Trevorrow in an elite club alongside Phil O'Shea, Russell Mockridge and later Robbie McEwen (only Sir Hubert Opperman has won more). Ever modest, Trevorrow downplays his achievements.

"I never really took it that seriously," he admits. "I would go over and muck around,

race a bit, get a few contracts. Then I got married so I came home, and I would not race the early season stuff. But the guys that really need to be commended [for establishing Australian cycling in Europe] are the likes of Sefton and Don Allan, and the riders that followed."

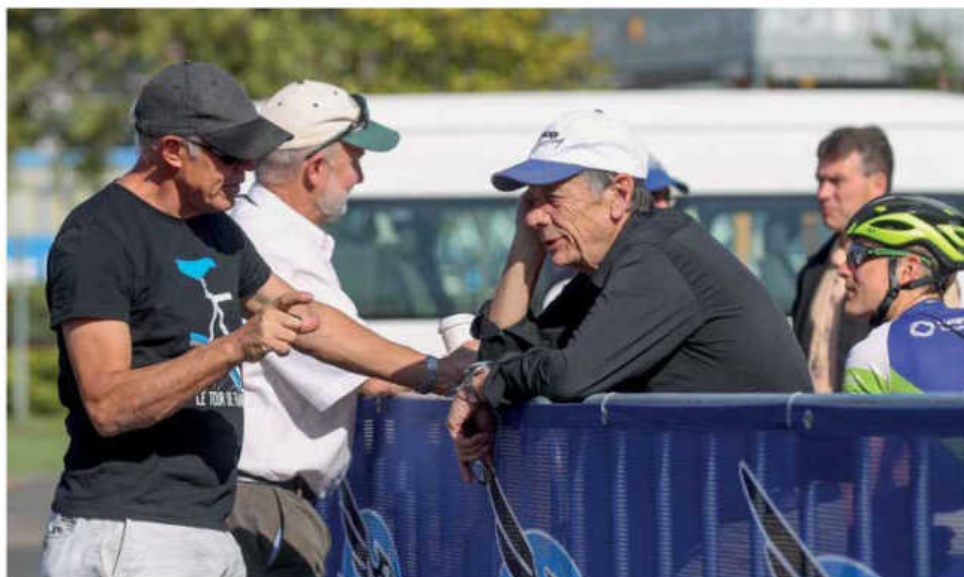
Olympic gold medallist and cycling commentator Scott McGrory, who often works with Trevorrow, is quick to rebut his friend's modesty.

"I think most of today's riders understand the role Trevorrow and his generation had in getting Australia to where we now sit in the cycling world," says McGrory. "However, I am sure there are people that think it all started with Cadel [Evans]. It has taken a lot of time to build Australian cycling's credibility on the road. It was the riders like John that challenged and inspired Phil Anderson to achieve what he was able to, and Phil in turn inspired another generation. So while we cheer for Simon Gerrans, Richie Porte, Rohan Dennis and company now, we should also pay tribute to those that came before as they played a role in this current success."

Fast forward to the present, and Trevorrow has parlayed his ability on the bike into a career as a cycling promoter, journalist and race director. When we speak in late 2015, Trevorrow has one eye firmly on the summer of cycling ahead, where GTR Events will deliver the Mitchelton Bay Cycling Classic, Road National Championships, Cadel Evans Great Ocean Road Race and Herald Sun Tour. His excitement about the potential of the new venture is obvious.

"By having one team delivering all the events, there are considerable savings – synergies so to speak. Gerry and Daryl are both passionate about the sport. Gerry needs another business like a hole in the head, but he is confident that we can lift the standard and deliver something really special. It is not just about bike racing – it's about entertainment, bringing a cycling festival to these events, so they become more than just cycling races and bring the spectators back."

He cites the Tour Down Under and Road National Championships as successful examples, and hopes smaller National Road Series events can follow in that direction. Actions speak louder than words, though, and Trevorrow's ability to attract



LEFT: Affable and unassuming, Trevorrow's larrikin spirit shines through a wealth of anecdotes from his 11 years of racing.

RIGHT: Trevorrow continues to make his mark on cycling, organising and promoting many of the biggest bike races across the country.



© CON CHRONIS

the likes of Tour de France winner Chris Froome to the Herald Sun Tour is telling.

"Trevorrow is the cycling expert within the group," McGrory explains. "It is that kind of insight that will benefit GTR due to the network of relationships he has built over time. It is the sort of stuff money just can't buy – that he was able to secure Froome to exclusively ride his Sun Tour is great evidence."

More proof that Trevorrow is the right man for the job comes from the continued success of the Bay Classic. Started in 1989 to "take the events to where the crowds were", the criterium series has become an iconic event on the cycling calendar. Trevorrow has also witnessed first-hand the rise of several generations of Australian stars, many of whom first tasted success at Port Phillip Bay.

Trevorrow's experience and contacts will be most important in running the numerous National Road Series races taken over by GTR Events. The domestic series faces an uncertain future, with two races postponed or cancelled in 2015 and governing body Cycling Australia undertaking a "comprehensive review".

Says McGrory: "The formation of GTR Events is a great opportunity for the domestic cycling scene to benefit from the collaboration of experienced people with cycling in their blood. However, it also comes at a challenging time for our sport. It is no secret that the local scene is not in great shape. We keep hearing of the boom in recreational cycling in Australia, but the upper level of racing is not getting the mainstream cut-through we would like."

Trevorrow is fully aware of the obstacles ahead, yet remains confident. During our

discussion he moots several possibilities – from extra prize money to greater financial assistance for teams – that would be music to the ears of cash-strapped domestic outfits.

"The National Road Series faces plenty of challenges, but I hope having one group running many of the events should settle things down," Trevorrow says. "I think we just need to sit down with some cool heads, look at the entire program, and see how everything can fit in best."

Whatever the success (or otherwise) of GTR Events, Trevorrow is already assured of a hallowed place in the history of Australian cycling. This is a man whose love of the sport runs so deep that he attended the 2013 Tour de France despite a cancer diagnosis.

"It was the 100th Tour," he recalls. "[Journalist] Ron Reed and I had arranged to write a book on it, but then I was diagnosed with oesophageal cancer. The doctors said it had to be a month between the last round of chemo and the surgery, so I replied: 'Well I can still get to the Tour.' My wife kicked me! But I had my last chemo on the Tuesday, and left for France the following day. I got home from the Tour, and three days later they chopped out my oesophagus."

Trevorrow has long worn the nickname Iffy, short for 'If Only', as recognition of what might have been. Smiling as our interview concludes, the Australian cycling hero is adamant that he has no regrets.

"I raced seriously, but I liked to have a good time," admits Trevorrow. "Obviously in hindsight I wish I had taken it more seriously, but that's just how I was at the time. I have had a sensational life, so no regrets from me." 🍷

One of the oldest cycling stage races in Australia, the Tour of Tasmania has a special place in John Trevorrow's heart. From competing as a teenager, to winning the Tour at the peak of his career, to running the race when Cadel Evans won consecutive crowns in the 1990s, the Victorian has crossed the Bass Strait on innumerable occasions. Now back in the race director's seat, Trevorrow is eager to further improve the marquee event on the domestic racing calendar.

"The Tour goes right back to 1930 when it was won by Sir Hubert Opperman, so it has an incredibly rich history," he explains. "I raced my first Tour of Tasmania when I was 17, and it was the biggest amateur race in Australia. In the following years I finished second and third – I always had 'Iffy' stories as to why I did not win – but I'd never won, and when I turned professional I could not race it again."

A change to the status of the race presented Trevorrow with an opportunity to add his name to an illustrious winner's list, featuring the likes of Opperman, Russell Mockridge, Remo Sansonetti and Don Allan. Despite lacking race fitness, Trevorrow claimed overall honours at the 1979 Tour of Tasmania.

"In the late 1970s they made it a professional and amateur race, the first combined race in Australia," he continues. "My two brothers were amateurs, and they were really keen for me to ride. I was out of form, I had not been on the bike for a while, so I did a few weeks training and then started a bit overweight. I remember climbing out of Launceston on the first stage, Peter 'Bulldog' Besanko said to me: 'Iffy, you look like you've farted in your pantyhose.' But to everyone's surprise I got through and won it."

Trevorrow's association with the Tour was renewed several decades later, in his capacity as a promoter and race director. It was during this time that Trevorrow witnessed the rise of Australian cycling star Evans, and heard a now-famous observation from commentator Phil Liggett.

"I started running the Tour of Tasmania in the late 1990s," he says. "Cadel won two of them, Stephen Hodge one – we had some really good events. Cadel was going so fast up Mount Wellington during a stage that Phil said he could win the Tour de France one day. Phil still dines out on that of course!"

While the Tour of Tasmania is today considered the pinnacle event on the National Road Series calendar, and recent winners have found themselves snapped up by World Tour outfits, Trevorrow believes there is still potential for growth.

"The Tour of Tasmania is a wonderful race," Trevorrow proclaims. "But we would like to get it back to where it was in the past. I think it needs a tougher stage: a real climber's finish. It needs to bring in the two major cities, Launceston and Hobart, with stages in each. Ultimately though, some of the rides down here are just jaw dropping."





© JERED GRUBER

LEFT: Hot, flat and dry, or rain soaked and steep, long hours on the C5 proved its worth as an all day high performer.

CONQUER EVERY ROAD

CERVÉLO C SERIES GLOBAL LAUNCH

THIS STORY BEGINS IN A TENT. IN AN OLIVE GROVE. IN A FIELD OF MUD. IN NORTHERN CALIFORNIA. WHICH IS EXACTLY THE WAY CERVÉLO WANTS IT. TO EXPLODE ANY PRECONCEPTIONS WE MAY HAVE ABOUT THE LATEST ROAD OFFERING FROM THE HIGH PERFORMANCE CANADIAN BRAND.

SINCE EMERGING through the triathlon scene in the mid-1990s Cervélo has built an enviable reputation as a manufacturer of elite pedigree racing bikes. As Global Marketing Director Antoine Ballon remarks over dinner, "If we do something we must win." This is precisely what fills the C Series project with so much risk – and intrigue. Along with Cervélo Lead Engineer Graham Shrive and Senior Product Manager Phil Spearman, Ballon admits the C Series has carried more than its share of in-house scrutiny. At various stages not everyone at Toronto HQ has felt it was such a shrewd move to deviate from Cervélo's high-octane racing roots. But when you consider roughly 60% of the global bike market now consists of endurance bikes, well, you can't blame Cervélo or its Dutch parent, Pon, for

wanting a chair at the sport's juiciest table.

Marketed under the banner 'Conquer Every Road' the C Series comprises C5 and C3 models and is unquestionably the most versatile platform ever to carry Cervélo decals. "We took a thorough look at how road bikes are being used," explains Phil Spearman, who was also heavily involved in Cervélo's R3 Disc project. "There's a real need for a fast, ultra-light bike that's easier to ride on a variety of road surfaces and in a broader range of conditions."

As Spearman suggests, look around most bunches and you'll find riders who simply aren't suited to the aggressive geometry and stiffness of high-end race machines. Sure they may have the money, but are they actually enjoying their riding? In the past it's a situation that's seen many Cervélo loyalists either wrestling with the wrong bike for their needs or switching to rival brands. Not anymore.

1



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[[...comparing the C Series with its older race-bred siblings is like judging an F1 machine with a rally car. Pointless.]]

2016 CERVÉLO C5 DURA-ACE DI2 9070

RRP	Table xhead please colour wth section colour
FORK	Cervélo All-Carbon, Tapered C5 Fork for Disc
HEADSET	FSA IS2 1-1/8 x 1-1/2"
SEATPOST	FSA K-Force for Di2
SHIFTERS	Shimano Di2 ST-R785, 11 spd
REAR DERAILLEUR	Shimano Dura-Ace Di2 9070, 11 spd
FRONT DERAILLEUR	Shimano Dura-Ace Di2 9070, 11 spd
BRAKE CALIPERS	Shimano BR-RS805 Hydraulic Disc
CRANKSET	Rotor 3D+ BBright, 50/34
BOTTOM BRACKET	Rotor PF-30
HANDLEBAR	FSA K-Force Compact
STEM	FSA OS-99 CSI
SADDLE	fi'zi:k Antares VS
CASSETTE	Shimano Dura-Ace 9000, 11 spd, 11-28
CHAIN	Shimano Dura-Ace HG900, 11 spd
WHEELSET	HED Ardennes Plus LT Disc
TYRES	Continental Grand Prix 180 tpi, 700x28c
BRAKE ROTOR	Shimano RT99 140mm

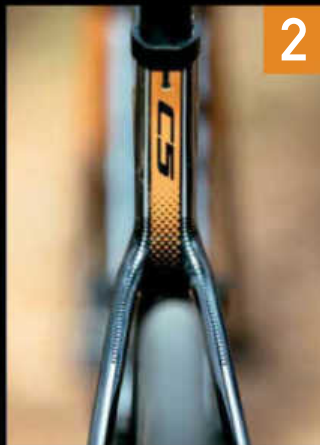
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1. Peak road performance awaits.

2. The C5 will accomodate tyres up to 38mm wide.

3. The back end of the C5 is built for all day epics; slender curved stays, hydro discs, Ardennes Plus LTs, and 28mm rubber... smooth and fast.

2



3



THE RIDE

Endurance/sportive bikes have long been sold on the twin premises of comfort and performance. Of course many such bikes have failed to deliver out on the road, so I saddle up on the C5 with an open but cautious mind. Over the course of the next three days I become increasingly convinced the engineers at Cervélo may have actually pulled it off.

Looking at the C5 is one thing. But with a series of curious design quirks it's a bike you really have to ride to fully appreciate. The geometry takes a few kms to get used to, but your perseverance is well rewarded. One example is the extended fork rake, 53mm on the 56cm frame. Cervélo uses this to increase trail and enhance ride stability. But it also means the front wheel juts out noticeably more than usual. Most of us find this slightly disconcerting at first, but it's all part of the wider C Series design philosophy and we quickly adjust to the view.

Setting out from our base in Napawine country we traverse an eclectic mix of roads and terrain. The overwhelming consensus is the C5 is a decidedly stable and obedient animal without much of the usual performance trade-offs. Despite the longer trail and enhanced vertical compliance, there's still enough front-end stiffness and feedback to inspire taut and confident handling, a feeling further aided by Shimano BR-RS805 hydraulic disc brakes – the same set-up featured on the new 2016 R3 Disc. It's certainly far more than the 'gravel bike' some anonymous keyboard warriors have been speculating since mock-up images were leaked in mid 2015.

Fitted with a 50/34 Rotor compact crankset and 11-28 Dura-Ace cassette the C5 proves a more than capable climber with its lengthened chain stays providing good traction on even steep and greasy pitches (of which we rode plenty). Power transfer through the Rotor PF-30 bottom bracket is also refreshingly efficient, offering above expectation acceleration for this category. If you have the occasional desire to race, or perhaps just to out sprint your mates for café bragging rights, you won't feel out of place.

Just as important is the way you'll feel post-ride. Following the main day of our visit – 120km with around 1,700m of climbing – I'm still remarkably fresh and limber, suggesting the C Series really does live up to the marketing spiel, delivering increased comfort and reduced fatigue. The next day's ride is cause for excitement, not muscle-induced dread.



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THE DESIGN

Cervélo was never going to rush into disc braking. Their goal was to win, not merely be first to market, so while the C Series comes equipped with Shimano RT99 140mm disc rotors this wasn't seen as the end of the design process but just the beginning. They've used the opportunity offered by the new braking system for a holistic rethink of the entire bike, flowing into a series of bespoke C Series design elements.

"The main dilemma was how to reconcile what we learned in our comfort research with what we know about elite bike performance," recalls Cervélo Lead Engineer, Graham Shrive. "Although a light bike is advantageous on any grade over 5%, pro racers have consistently told us heavier frames with thicker tubes are more comfortable. This was in direct conflict with one of our main priorities: bringing a low weight bicycle to the endurance category."

In addition to being light, the C Series frames also need to be stiff enough for high-performance and confidence inspiring handling on mixed surfaces. Enter the Squoval 2 tube. Drawing on learnings from Cervélo's landmark R5ca project, it combines the attributes of both square and oval shaping to maximise stiffness and minimise weight.

"The C Series boosts Squoval 2's vertical compliance by slightly flattening the vertical plane, pushing the material most affecting stiffness as far from the neutral bending axis as possible," explains Shrive. "This gives us a highly damped, vertically compliant disc frame that's the lightest on the market (850g), even with the additional frame volume."

"We wanted a bike that tracks well and remains stable regardless of surface conditions, so we extended both the front and rear centres," continues Shrive, explaining longer chainstays, curved seat

stays, a shallower headtube angle (71.5% on the 56cm frame) and the extended fork trail all work to enhance ride stability. The bottom bracket also sits closer to the ground, lowering the centre of gravity by dropping the rider relative to the handlebars. Coupled with a taller fork this adds up to 22mm in frame stack without exaggerating the headtube. This means you won't feel like you're riding around in the 'up periscope' position. (Or as a fellow scribe from New York eloquently suggested, "it's an endurance bike that won't make you look like a tool.")

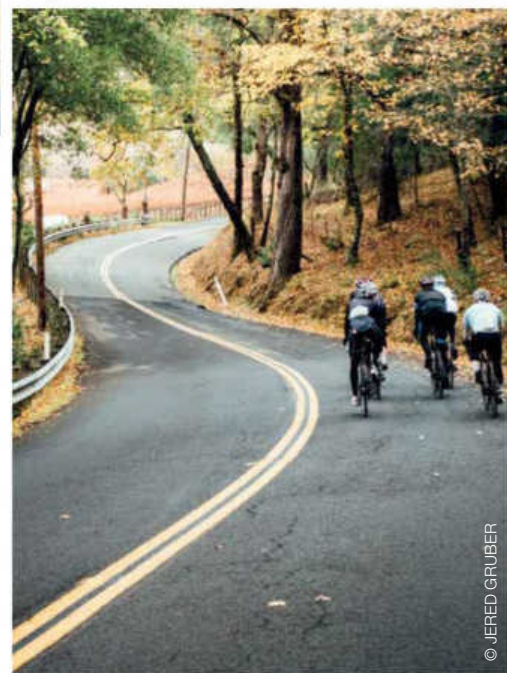
As with the R Series, the C Series adopts a single piece rear triangle and wider seat stay placement, boosting claimed bottom bracket stiffness by 25%. Through-axles improve rotor alignment and eliminate the risk of wheel dropouts. The C5 also boasts a proprietary fork painstakingly designed (apparently there were more than 150 prototypes) and built by Cervélo's pioneering Project California team, led by one of the world's top carbon gurus, Don Guichard. Generous clearance levels allow you to run anything from 21mm to 31mm tyres without risk of frame rub or jamming.

THE SPEC

The C Series spec is excellent. The C5 ships with Dura-Ace Di2 9070 or Dura-Ace 9000 11-speed groupsets, Ardennes Plus LT Disc wheels, Rotor 3D+ BBright 50/34 compact cranks and fi'zi:k Antares VS saddle. The C3 comes with Ultegra 6870 Di2 or 6800 11-speed and offers HED Ardennes Plus GP Disc wheels with Rotor 3D30 BBright 50/34 compact cranks, while the C3 SRAM Force 1X option delivers a more value-conscious price point. In 2016 you won't have to worry about choice of colours because the C5 only comes in one: black with hints of white and brown (red replaces brown on the C3). It's decidedly



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understated but the C Series is about inner confidence and riding enjoyment, not a bling-inspired arms race.

THE VERDICT

The C Series is likely to be polarising, with the main detractors being those who simply can't separate Cervélo's past from its future. Thing is, comparing the C Series with its older race-bred siblings is like judging an F1 machine with a rally car. Pointless. The C5 isn't meant to be an S5 or even an R5. It's an outstanding new Cervélo for an entirely new generation of Cervélo riders. It's lightweight, beautifully appointed and effortlessly balanced to ride – yet a million miles from boring. It's from the top shelf of endurance bikes so it doesn't come cheap. But it will be a delight to own for committed riders who, while perhaps not regular racers, hate the idea of compromising and spend plenty of hours in the saddle each year in all manner of conditions. Start saving folks. 🍷

Peter Maniaty travelled to California as a guest of Cervélo.



ON TRACK FOR RIO

AUSSIE RIDERS' PREPARATION FOR THEIR TILT AT OLYMPIC GLORY IN RIO TAKES THEM THROUGH ROUNDS OF INTERNATIONAL COMPETITION. GARY SULLIVAN CUT HIS TEETH ON THE TRACK, SO WAS KEEN TO CHECK OUT THE ACTION IN CAMBRIDGE NZ.

THE SECOND ROUND OF THE 2015-16 UCI Track Cycling World Cup came to the Avanti Drome in the rolling farmland of Cambridge, New Zealand

in December. With limited opportunities for teams to secure positions at the Rio Olympics all the top contenders were there, and everybody was pulling out all the stops.

The spin doctors will say that it's the Games that really count, but for riders a World Cup is a chance to show what they can do, and for team managers and coaches it is an accurate real-world test of their programmes.

The men's Team Pursuit is one of the oldest Olympic events, a feature of every Games programme since 1908. Teams from 15 nations lined up for the time trial round, with Australia's squad of Jack Bobridge, Luke Davison, Glenn O'Shea and Michael Hepburn punching out a strong 3.56 effort for first place. The kiwis were next, two seconds adrift, and the next six teams were all within the next few seconds on the relentless clock.

The aussies lost Omnium specialist Glenn O'Shea at the 2km mark, leaving only the required three riders to complete the ride.

Denmark had a tough time of their qualifier, crashing hard due to a moment's inattention, but drew a standing ovation from the sell-out crowd when they restarted, battered and bruised, and qualified a close third.

The Danes faced the New Zealand team in the first round of racing, and the local team won comfortably. It was a trans-Tasman final after Australia caught Switzerland in their race.

Cambridge World Cup

BY GARY SULLIVAN

IMAGES BY GUY SWARBRICK



Germany were too strong for the Netherlands in the race for the bronze position.

Australia rested Omnium contender O'Shea, and subbed him out for Alex Edmondson. The team set a new Australian record of 3.53 in blitzing the kiwis by a clear margin.

In the Women's competition the top two teams were separated by less than a second, Canada just edging out Australia's squad of Annette Edmondson, Ashlee Ankudinoff, Georgia Baker and Amy Cure. New Zealand and USA were three and four seconds adrift, so a final showdown between Canada and Australia looked likely.

That is how it transpired, with Australia putting Isabella King in for Edmondson and smashing the kiwis by five seconds. Canada easily beat USA in their race round.

The final was a thriller, with the Australian team coming out on top by a mere five hundredths of a second to win. New Zealand easily dispatched USA for third.

The Men's Team Sprint saw 19 teams in the qualification round. Germany took the number one spot, a few tenths ahead of New Zealand, and Jayco-AIS third only one tenth of a second adrift. Great Britain got into the race for bronze ahead of Russia and the Netherlands, with World Champions France only managing seventh place.

In the finals the German team of Olympic medalist Rene Enders and World Cup medalists Max Niederlag and Joachim Eilers came back from a slim deficit to beat New Zealand on the last lap, despite frantic support from the home crowd. The Jayco-

AIS outfit of Nathan Hart, Peter Lewis and Matthew Glaetzer dispatched the Great Britain team for the bronze medal.

The Women's event was even tighter, only a tenth separated fastest squad China from the Jayco-AIS duo of Kaarle McCullough and Stephanie Morton. Third and fourth teams from the Netherlands and Germany were close behind and only a hundredth of a second apart.

The Chinese pairing of Jinje Gong and Tianshi Zhong are World Champions and World Cup leaders, and made no mistakes in the final when they recorded a fast 32.68 against Jayco-AIS on 33.2.

The Keirin is a highlight of any track meet, and at times creates some desperate racing from the first round. The first round draws were all full of well-respected names, and every heat was hard fought, with riders hitting out at top speed as soon as the pacing motorbike moved aside.

Safe passage to the next round went to the German Eilers, Hersony Canelon of Venezuela, former World Champion Maximilian Levy from Germany, Matthew Baranoski from the USA, Olympic Sprint champion Jason Kenny from the UK, and New Zealand's Sam Webster. Riders fought back through the repechages to the

TOP LEFT: The fastest man in the world?

Australia's Matthew Glaetzer had power and speed to burn in Cambridge, and must be the favourite for 2016 Sprint glory.

TOP RIGHT: World Champion sprinter Kristina Vogel shares the podium with Stephanie Morton (Australia), and third places Simona Krupeckaite (Lithuania).

TRACK GUIDE

Track racing is really cycling boiled down to its most elemental: how fast can you go? Even an experienced roadie can be baffled by some parts of the sport. Here is a basic guide to the events you are likely to see at a World Cup or Olympics.

The blue ribbon event is the Sprint. In French, the native language of cycling, it is *Vitesse*. Or literally, speed. So why do they start so slow?

Sprint races are two-up matches, one rider against the other. Sounds simple? But it is not. It is about 750m, or three laps of a modern track. The entire Sprint event is crammed into a single day, which will mean at least nine efforts must be made if you are the winner of every race.

There are two other events for the sprinters.

The Team Sprint is a flat-out effort over three laps, from a standing start. Three team members take a lap at the front each and drop out after their turn, leaving one rider to finish. Teams start in opposite straights, and effectively chase each other. After qualification, the two quickest teams race for gold, the next two for bronze.

The Keirin is run over 2km with six riders in each heat. A motorbike paces the race for the first 1375m, building the speed gradually to 50kph before getting out of the way for the high speed finale. Riders tend to be specialists at this event which requires almost the same top speed as the Sprint, but must be maintained for over 600m. With six riders on the track positioning is critical.

Time Trials, 1km for men and 500m for women, are a grueling and specialist event requiring speed and fine judgment of a rider's effort. Since they were dropped from the Olympic programme they have also disappeared from World Cup competition, except as part of the Omnium, but are still held at the World Championships.

The Individual Pursuit sees riders start on opposite sides of the track and race over 4km, or 3km for women, effectively chasing, or pursuing, their opponent. It is a lung-searing sufferfest, wherein the best pursuiter's average over 55kph. Four riders comprise a pursuit team and average well over 60kph- from a standing start!

There are Scratch Races - a set distance, a field of up to 24 riders, first across the line wins. There is the Elimination where every other lap a rider is eliminated by being last across the line, until two riders race for the win. There is the Points Race where riders sprint for points every 10 laps, and get a bonus 20 points for gaining a lap on the field, at which point they revert to the distance being counted for the bunch. For real chaos though, there is the Madison. It is a points race, but competed for by two-man teams, one of whom is 'racing' at any time. The other is rolling around slowly until the race catches up to wherever they are, at which point the incoming rider picks up some speed by rolling down the banking, and the man on duty grabs the incoming rider's left hand and slings him in to take his place. It is very exciting action - if you can keep track of it!

Six events are rolled into one over two days to find the best all-rounder: the Omnium.

The events are a Flying Lap TT, an Individual Pursuit, an Elimination, a Scratch Race, a Kilometre TT, and a Points Race.

AUSSIE WORLD CHAMPIONS

Australians have taken a total of 73 World Titles since Bob Spears took the first one in Antwerp in 1920 for the Sprint. For most of track cycling's long history Australian riders were too far away to have much impact, and it was 32 years before another rider from down under took a title, when Sid Patterson won the first of his two rainbow jerseys in the Pursuit. As travel became easier the titles came faster, and even with this late start Australia sits fifth in the all-time medal table.

Australia's best event for World's gold is the Team Pursuit with 10 titles, the first in 1993. Many of Australia's best road racers come out of the Team Pursuit squads: Stu O'Grady, Bradley McGee, Jack Bobridge, Rohan Dennis and many more cut their teeth on the track.

The Sprint has seen the most medals overall, including eight World Titles, from Gordon Johnson in 1970 through double champion John Nicholson in 1975 and 76, to Stephen Pate, Gary Neiwand and Darryn Hill during the 90s, and Sean Eadie in 2002.

Individual pursuists have pulled on the rainbow stripes eight times. Sid Patterson won in 1952 and 1953, Steele Bishop in 1983, and in 2002 it was Bradley McGee's turn. Jack Bobridge took gold in 2011, and Michael Hepburn doubled in 2012 in Melbourne and 2013.

One of Australia's greatest ever cyclists of any discipline has to be Tasmanian Danny Clark. Among his many palmares are two World Titles in the Keirin, which he won at the event's first two editions. Clark also won three motor-paced World Titles before that event was discontinued.

The Keirin World Title has also been claimed for Australia by Gary Neiwand in 1993, Ryan Bayley in 2001, Jobie Dajka in 2002, and Shane Perkins in 2011.

Shane Kelly has three World Titles to his name in the 1km Time Trial, as well as medals in that event and the Keirin.

The endurance events on the track have seen Australian success too. Gary Sutton medaled

in the Points Race three times during the 80s; Cameron Meyer won the event in 2009. The next year he repeated his win in the Points Race, Leigh Howard took home the rainbow for the Omnium, and partnered Meyer to win the Madison. Michael Freiberg took out the Omnium in 2011, while Meyer/Howard won the Madison. Meyer won the Points Race again in 2012, and Glenn O'Shea took out the Omnium title.

Australian women are a very powerful force in World cycling, especially on the track. Their story is not as long as their male counterparts, but in the 20 years since Michelle Ferris claimed a bronze medal in 1995, Australian women have taken 73 medals, including 20 golds.

Anna Meares has been a medalist in the sprint events since her first in 2003, and she has scored World Titles in the 500m TT in 2004 and 2007, the Team Sprint with Kaarle McCullough in 2009 and 2010, the TT again in 2010, before a trifecta of titles in Apeldoorn in 2011: the Sprint, Keirin and Team Sprint she shared with McCullough again. Meares backed up the Keirin and TT titles in 2012, and won another Keirin in 2015.

On the Women's endurance side, Lucy Tyler-Sharman won her World bands in the Individual Pursuit in 1998. She was followed by Katie Mactier in 2005, Amy Cure in 2014, and Rebecca Wiasak in 2015. Kathy Bates took out the Points Race in 2007. In the Omnium Josephine Tomic was the victor in 2009, and Annette Edmondson is the reigning champion from 2015.

The Team Pursuit opened for women in 2008, and Australia has featured in the medals in nearly every running, including title wins in 2010 and 2015.

Alongside all these rainbow results are over 100 medals of silver and bronze. The record of Australians in the Olympic Games is equally impressive, with many medals in all events and standout efforts such as Ryan Bayley's Sprint / Keirin double in 2004 and Anna Meares' medals in three Games from 2004 to 2012, including two golds.



semifinal round, and the final line up saw Webster and Canelon dropping out and Russia's Nikita Shurshin joining Germany's Eric Engler on the start line with the other first round winners.

In the final it was Jason Kenny who attacked first, but he was passed almost immediately by Engler, who took on the race at full gas. Kenny attacked again in the back straight and was looking strong as the tightly packed field took the bell, with Shurshin making a run alongside. Shurshin never completed his pass, but he forced Eilers to go three wide down the back stretch in the last lap, with Levy on his wheel. Eilers swept to the lead around the final bend, and just managed to hold off a fast-finishing Levy on the line. Baranoski edged home in third.

The Women's Keirin favourite was World Champion Anna Meares, who was looking her imperious best through the qualifying rounds. Meares was confident, and never put a wheel wrong in positioning herself, but she was nursing a back injury and perhaps not at her best.

Her ride in the final was textbook perfection, but did not quite prevent China's multiple Olympic medalist Shuang Guo from edging past for the win. Canada's Monique Sullivan was a very close third.

Running over two days, the Omnium events came down to nail-biting finales.

The Womens Omnium was a three-way battle between the Australian World Champion, Annette Edmondson, Allison Beveridge of Canada, and Belgium's experienced track star Jolien d'Hooere.

d'Hooere opened her account by winning the Scratch race, but did not fare so well in the Individual Pursuit. Even with another win, the Elimination Race at the end of Day 1, d'Hooere trailed Dutchwoman Kirsten Wild, who had three second places to her credit.



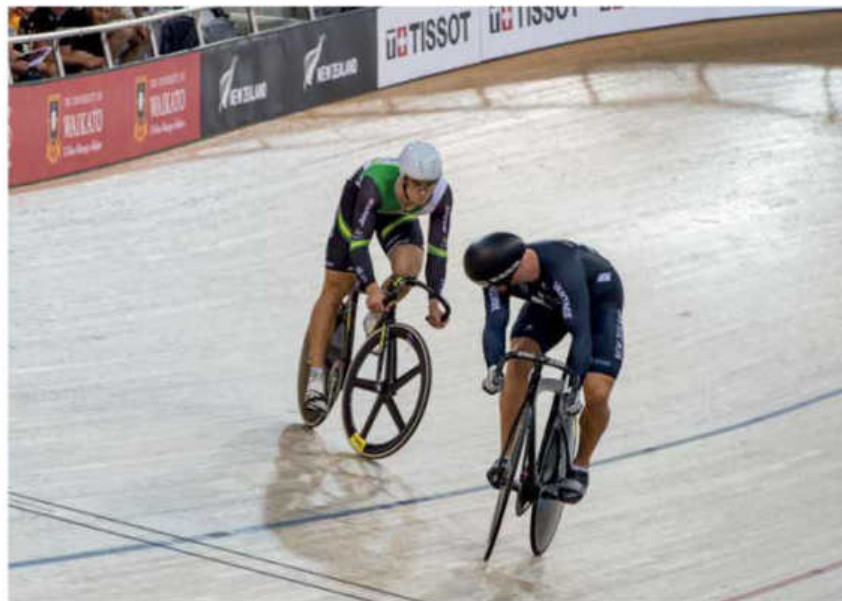
CLOCKWISE FROM LEFT:

World Keirin Champion and multiple medallist at world level, Australia's Anna Meares.

Australia is a blur in the Mens' Team Pursuit

The semi-final between local Eddie Dawkins and Matthew Glaetzer had everybody in the stadium on the edge of their seats.

The Mens' Sprint podium from left to right, Max Niederlag (Germany) in second, winner Matt Glaetzer, and Germany's Maximilian Levy in third.



On Day 2 Edmondson came to the fore with a win in the 500m TT, while Beveridge started pushing forward with a third place, and both women passing d'Hooe who had only middling results against the clock. The Flying Lap TT cemented this situation, with Beveridge holding a slim lead into the last event, a Points race.

Beveridge did everything right, and Edmondson was left fighting for second, with d'Hooe closing her deficit by gaining a lap in the company of Wild and USA's Jennifer Valente. That move was not quite enough, and Edmondson finished up in second place behind Beveridge.

In the Mens Omnium the Dane Lasse Norman Hansen beat Belgian Six Day star Kenny de Ketele in the opening Scratch race, then backed that win up with a third place in the Pursuit.

GB's Chris Latham was the fastest pursuiter of the main contenders, and he was third in the Elimination Race, won by Frenchman Thomas Boudat with Latham third.

That put Latham in the lead overnight, with Hansen only four points behind.

The Kilometre TT was won by kiwi Nick Kerzougou, the only rider to clock under 1'03" for the distance. Australian Glenn O'Shea finished second, and another strong performance in the Flying Lap brought him into contention overall. Kerzougou was again fastest but not threatening overall.

It all came down to the closing Points Race, this time in a decisive breakaway. De Ketele stole a lap on the field, and the accompanying 20 points, but then Hansen joined O'Shea and Latham and lapped the field too, with a lot of help from aggressive Colombian Juan Arango. That move cemented the trio's lead in the race, but it was still wide open among them. Hansen's strength told the story of the remaining laps,

with a series of attacks that scored enough points to make him the clear winner, of the Points Race and the Omnium. Latham and O'Shea rounded out the medals.

At World Cup events there are some extra events carrying UCI status, and the most exciting is the Madison.

The Australian pairing of Jack Bobridge and Alex Edmondson provided early entertainment by attacking almost from the gun and quickly gaining a lap on the startled field. The fast Team Pursuit they had ridden must still have been in their legs, because almost as soon as the Aussie pair had gained their lap the field was spread-eagled around the track by a long series of attacks. Bobridge and Edmondson lost their lap, then pulled out altogether while the Swiss pairing of Silvan Dillier

beaten by Virginie Cueff of France, and then losing out in the repechages as well.

The semifinal round saw Vogel get the better of Lithuanian veteran Simon Krupeckaite, and Morton finished Guo's chances in straight heats.

The battle for third place went to three races, with Krupeckaite coming out on top. The gold final pitted Morton against Vogel. Morton rode well but had no answer to Vogel's speed and power.

The Mens Sprint showed just how high the standard is in an Olympic year.

Australia's Matthew Glaetzer made no bones about his form at this World Cup. He qualified in a blistering 9.698 for 200m - that's over 74kph. His time was only a blink faster than second, and the top eight riders all clocked under 10 seconds.

[[since Michelle Ferris claimed a bronze medal in 1995, Australian women have taken 73 medals, including 20 golds.]]

and Thery Schir piled up sprint points.

They looked to have it in the bag but the French team of Benjamin Thomas and Six Day rider Morgan Kneisky clawed back their advantage, came home the winners by taking out the final sprint.

The Women's Sprint tournament at Cambridge opened with a very strong qualification ride by Elis Ligtlee of the Netherlands, with a flying start 200m time of 10.73 seconds. Australian Jayco-AIS rider Stephanie Morton was second, with Shuang Guo of China in third.

The first round of racing produced no surprises, with World Champion Kristina Vogel among the round winners. The second round saw top qualifier Ligtlee

Glaetzer and Niederlag worked their way to a gold final, Glaetzer dispatching local boy Eddie Dawkins in the semis.

In the race for bronze, despite massive support from his fans, Dawkins could not find a way around eventual winner Levy.

In the first match of the gold final the German led at the bell, having committed to a long sprint. Glaetzer accelerated off the banking on to the back straight to make his pass on the final bend and win narrowly. In their second match Glaetzer built his speed slowly, and tempted Niederlag to attack him at the bell. Glaetzer managed to accelerate enough to keep the German outside him, and was too strong as they sprinted around the final bend. 🌟

BANKS & BENDS

THERE REALLY IS NOTHING else quite like track racing in the whole of cycling. If you're not immersed then

you may well miss this, but once you do ride into that banked gladiatorial arena and into the thick of the action, the purity and intense but simple complicity will grip you with every scraggy finger nail it has.

Perfection on the track has been a matter of national pride ever since the long lost sepia tinted days of the village cinder tracks. Track racing is a great leveler, and one where there is absolutely no hiding. It's also the perfect schoolyard for any form of cycling.

You'd be hard pushed to find many of our top road riders that were not groomed and graced on the track. It is a virtual racing rite of passage, and one with highly proven rewards.

It's true that many of these stars of the moment, and the past, cut their youthful knees and racing teeth growing up on the boards; but that doesn't mean that there are not huge gains, and endless thrills out there just waiting to be snared for all of us – no matter how old or what standard you ride at there are great riches to be dug up on the track.

In essence, most track racing is intensely simple; you don't need huge financial and technical advantages, and at the end of the day you won't see a hill or even have the option of changing gear. Unless you're racing at the pointiest part of the sharp end then it is a great leveler. This 'one gear fits all' stance also takes away so much of the thinking and complication involved in other forms of bike racing.

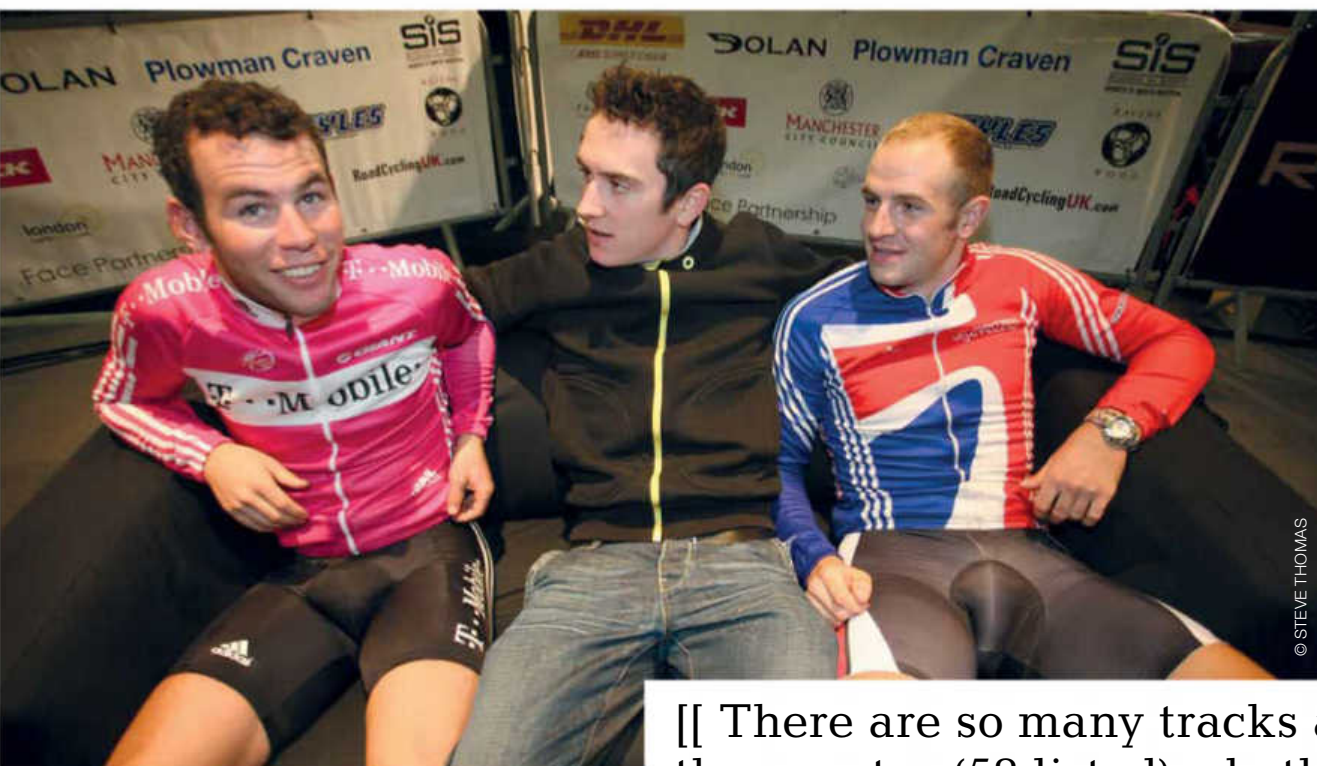
Riding the track is like riding a full road race, only in a very confined and controlled timescale. It makes racing incredibly fast and close fought, forcing the smarter riders to compress their tactical and physical mastery into just a few short minutes. The lessons that you can learn simply from watching this are huge, and from being a part of this they double.

AUSTRALIA HAS A RICH TRACK RACING HERITAGE, YET MANY OF US ARE YET TO SAMPLE THE DELIGHTS OF HURLING AROUND A VELODROME.





TRACK racing is ultra close contact, but without gears, brakes and outside elements to contend with it's also surprisingly safe.



LEFT: Cav, Geraint Thomas and Ian Stannard, all schooled together on the track, a testament to the virtues of oval mastery.

© STEVE THOMAS

[[There are so many tracks around the country (58 listed) – both indoors and outdoors...]]

The physical benefits of this fast and furious ever moving battle are invaluable too – and will make the gains from any form of interval training you ever attempted fall in a great heap by the roadside. And what's more – it's possibly the most fun you can have on two wheels!

There are so many tracks around the country (58 listed) – both indoors and outdoors, and it would be a shame not to dip your feet into the great surf of track racing.

You don't need to rush out and invest your annual salary in gear, as many tracks will have rental bikes available for taster sessions, and some also hold regular road bike training slots – which are a great way to get hooked on the lever-less drops of the boards.

Check out your local track, and be sure to enquire about taster sessions.

ONE DIRECTION

It doesn't actually take too long to get used to riding a fixed wheel; the key things are to keep the pressure on, and to remember not to stop pedaling.

It's also important to have fairly tight pedals, because you can not afford for your foot to come out on the track, it could be deadly.

With riding a fixed on the track you are also not able to get out of the saddle to ease yourself, so it always pays to use chamois cream in your shorts to ease potential chaffing.

DEFYING GRAVITY

You do really need to build up and get a feel for things when it comes to riding and using banking effectively.

Being relaxed and aware is very important; if you get too tense, you'll make mistakes. Start by building up to a reasonable pace, and then slowly work your way up the banking, lap by lap. Don't try heading straight up there; build your confidence first.

After a while you'll get the feel for things, and as long as you keep a basic speed you won't slide down.

As you progress you can learn to move around more; but always look over your right shoulder before moving position, to make sure nobody is behind you. Think of the banking in the same way as a corner on the road; look where you want to go and aim for that line.

BLENDING IN

When riding in a bunch on the track you need to be very smooth, and also be aware and think about the riders around you. Avoid any sharp or erratic movements, hold your line, and always take a look over your right shoulder or down between your legs, before moving over – to be sure that nobody is coming up from behind, or overlapping you; otherwise you'll all be down.

If you're taking your turn on the front and you intend to swing off then speed up a little before doing so, otherwise if you ease as you swing off you create a jerk reaction behind, which can be dangerous.

You also need to keep your momentum to get back into the line out – just how far you swing up will depend on the size of the track and number of riders – and only experience will teach you that.

BUILDING BLOCKS

If you haven't raced on the track before it can be a real shocker. The sheer intensity and speed can take you by surprise; so it's important to put in some basic power and cadence work beforehand.

It doesn't matter how fast you are on the road, it's different on the track. You not only need to have a permanently high power output; you need the fast moving cadence along with it.

The best way to replicate this is on free rollers, or failing that, by using a turbo trainer. If you can do it on a fixed-wheel, then all the better. Spend time working on the required power and leg speed, but also focus on attaining a relaxed position on the bike – this is where rollers are best, as they force you to stay composed.

TOOLED UP

For some reason people like to have the best and latest kit when it comes to their road bikes, but want to keep it really cheap for the track. This is okay, and you can easily get away with second hand bikes and lower end kit for local meetings; but do make sure that they are safe, that they haven't had any bad crashes, and check that things are in good and safe working order.

Track bikes can last a lifetime, and for general bunched racing weight isn't so crucial, so you can ride almost anything. Carbon is fantastic, although regular steel and aluminum is almost as effective, and their different ride strengths may even suit certain events better.

RACE-PROVEN CARBON WHEELS



Introducing IRWIN'S ICW-38CD Disc Brake Wheelset

available online or at your nearest Irwin stockist

WATTS DON'T LIE

THE LOOK At IRWIN, our design process ensures your wheels look as good as they roll. Care is taken to ensure every step in the manufacturing and the hand building of your wheels is scrutinised by our experienced team and in-house tested to the highest standard.

THE QUALITY Our head designer has had decades of design and manufacturing experience backed up by a large and experienced R & D team. Our wheels are fastidiously hand built to 0.3 lateral, 0.4 vertical and 0.5mm dish tolerance. They come with 6-pawl 60 ratchet ceramic bearings standard, 2 full sets of IRWIN bespoke brake pads and a 2 year conditional warranty.

BESPOKE TECHNOLOGY Under intense braking, the patented IRWIN rim maintains its lateral specification, significantly reducing the thermal expansion on the ceramic braking surface compared to ordinary carbon fibre rims. Combined with unparalleled aero performance and stiffness, we hope you enjoy using them as much as we did perfecting them.

Available in 38, 58 & 85mm profiles along with 38/58 and 58/85mm combinations all with 26mm "Wide" rims. Check out our 2 wheels in 1 disc wheel that comes complete with track adapter.

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CLOCKWISE FROM TOP LEFT: A typical team table at a track meet, where fine tuning of gears is best attained through swapping chainrings, and snacks are always at hand - a meet can be an all day job.

Absolute focus for the start of a short event, where positions off the block are vital to the outcome.

Close quarter motor pacing is one of the secret ingredients in building high-end speed and power; and on a track it's fully under control.

CRANKING IT UP

Most track bikes will have 165mm, or even 170mm cranks – this makes acceleration and pedaling faster much easier.

For a pursuit racing some riders may use 172mm to get more power out, and you can even get by on some older velodromes with these for all races (as they have shallow banking). It's always important to keep your chain tensioned and clean too.

ROLLING STOCK

Serious track riders will use various different wheels, depending on the event and the conditions. For long races, experienced riders often run regular spoked wheels, as they are more comfortable; one-piece carbon and deep section rims are great for indoor tracks where winds are not an issue, and in events where rigidity is important. A spare set of wheels is also wise if you intend racing frequently.

Most trackies almost always use tubulars – they are so much more flexible and responsive – but make sure they're stuck on well, and keep an eye on the side walls; with the pressures you put in, and on, them they can get ragged – and you can not afford any problems.

For outdoor tracks you can often get away with 700c wired on tyres, as the surfaces are rougher and the banking is not so steep.

THE COMFORT ZONE

Finding a really comfortable riding position is very important on the track.

Many specialist track riders have different positions based around their chosen events (pursuit/sprint etc).

A general bunched track racing position is often totally different to a road racing position, due to the distance and lack of hills; but that's not the case for everyone.

You do need to be very comfortable and relaxed, and able to look and see ahead. Remember that on the track you rarely get out of the saddle, so this relaxed approach is important.

COUNTING COGS

It can get complicated when talking about gearing – but at the end of the day most track riders only ever have a choice of three gears. They make their decisions on the spot, based on conditions, the event, and how they are going to ride it.

Most common in this choice are a selection of 49/50 and 52 chainrings, and a 15-rear sprocket, as the chainrings give a finer ration differential. If a rider is on top form and intends on attacking and powering off the front they'll go with the big gear option. If the track is small or there are a lot of sprints, then they'll go lower. These may seem like minuscule increments, but they can be huge when you only have one gear choice.

PISTE PERFECT PLANNING

Long before you even get to the track you should be thinking about the events that you will ride and their requirements, and working on that in training. Whether it's a pursuit or a points race; they all require certain attributes that need specific

training. It's not rocket science, so logical thinking and replication should help in preparation for regular track racing and training for it.

Before the start of any event you should decide on how you plan to ride it – but of course leaving some room for change.

For example; if it's a devil take the hindmost then decide on whether you intend to ride from the front, staying in the first three or four riders and making sure you don't get boxed in, or whether you plan to hang on the back and come around at the last minute.

If it's a points race decide on whether you intend to go for lap points in the sprints, or if it's a smaller track if you intend on saving energy and going for a lap.

You will undoubtedly use all approaches at some time, but decide in advance on a basic game plan.

MANAGEMENT STRATEGIES

Track meetings can often drag on all day, so you do need to be well prepared to keep on top of things.

Start by knowing your program; when you are on and what's on before you. There's nothing worse than missing your event or being caught unprepared.

Stay warm and try to keep moving between events – rollers are great, but even just riding around the track inside helps.

The racing is also very intense, so be sure to come armed with plenty of snacks and drinks to digest during the meeting, and try not to eat anything heavy before the race – it'll probably end up on the track. 🍌



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Photo: Sam Wiebe

RYAN ANDERSON, TEAM OPTUM PRO CYCLING P/B KBS

The elegant **Mini GPS** is lightweight, easy to use and ideal for the cycling minimalist. Weighing only 30 grams and housed in a machined aluminum bezel, the compact device is still powerful enough to record up to 100 hours of accurate cycling data. The ultra sharp, semi-customizable display features auto-scrolling ride stats and custom lap presets. Rides are saved as .fit files and can be seamlessly uploaded to our free, intuitive **GPS ROOT** website for detailed analysis and cataloging; no additional software is needed. Simply plug it into a computer via micro-USB to upload rides, and to recharge the unit for up to 10 hours of runtime.

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Re-inventing the wheel

BY STEVE THOMAS

HANSEN TECH

ADAM HANSEN IS ONE OF THE MOST ENDURING AND ENDEARING RIDERS IN THE PRO PELOTON, AND HE'S ALSO SOMETHING OF A HERETIC WHEN IT COMES TO THE CONVENTIONAL WISDOM OF CYCLING.





© STEVE THOMAS

OPPOSITE PAGE: With his cockpit setup Adam can get lower than low.

FAR LEFT: Being seamless and aero when against the wall, can make up crucial marginal gains.

LEFT: Such an extreme drop between saddle and bars won't be tolerated by most people's bodies, but it does bring aero benefit.

WITH A MODERN DAY record number of back-to-back grand tour finishes to his credit Adam Hansen is a self-made legend of pro bike racing, and something of a rebel with a cause too.

We listened intently as he explained his theories on all things technical and traditional in pro bike racing. While much of it is based on gut feel and pseudo-science he has an enviable list of successes and despite his unconventional approach to biomechanics his body has not caved in. Hold on tight it's a hell of a ride.

POSITION IS EVERYTHING

Adam's riding position is probably the most extreme in the World Tour: "I have a huge handlebar drop from seat height. I use 180mm cranks, ride 38cm handle bars and have my cleats pushed back as far as I can."

"It sort of goes against what everyone says, and against what the team mechanics tell me. Cycling is a very cultured sport and has a huge history, which is very special; but some people are a bit stuck in their ways too."

Those huge great pedal levers are something of a Hansen trade mark; "At 100 rpm on 180mm cranks, compared to 100 rpm on 172.5mm cranks, the leg speed is faster on the 180mm cranks. As an amateur I rode T.A 185mm cranks, but when I turned pro the longest I could get were 180mm."

"Back then I didn't have SRM's or anything like that, and when I did I found that you had to calibrate them every few

months. In with the calibration you had to put crank arm lengths, and put on weights accordingly to figure out the equation."

"This told me that crank length did mean something; it affects Newton metres – and Newton metres equals Watts times cadence. So, with a longer crank you produce more power."

"Just think if you were removing the wheel of a car; with a short wrench it's really hard. A longer wrench levers more power. Okay on a bike it makes

"At HTC they used to say that my cranks were too long to get around corners; but I'd been doing just fine on 185's. Sometimes I do have problems in pedalling around tight corners on descents, but I know that and factor it in."

"There is also the argument about it taking longer to make a pedal revolution, but at the end of the day it's all about leg speed. If one guy is riding at 100 rpm and another at 90 rpm, but taking longer to make the same turn,

[[My last hand made jersey was a one piece job with no seams. The company where I had them made hated me and my crazy ideas.]]

acceleration harder, but over the course of a race it makes things easier."

"The point of cycling (racing) is to be efficient, and to save your power for the final. Now look at it in this sense; I'm 186cm tall. If another rider is 156cm tall and we both use the same crank lengths, who has longer cranks based on crank length ratio to leg length?"

"This little guy is on huge cranks compared to me. I don't understand how everybody thinks that riders should be using the same crank lengths."

"Most climbers are small, but they ride the same crank arm length as us tall guys. In comparison to their legs their cranks are 25% longer than us, meaning that the tall riders are effectively on shorter cranks."

technically it is still the same leg speed, and at the end of the day it's about how much effort you save over time."

Within some dated team systems his approach has caused a few hunches and frowns; "With lots of teams it's the mechanics that tell you the bike position that you've got, and I've never understood why a mechanic should tell you that. My stance has always been to ask them to show me some concrete proof that a shorter crank is better; and if they can then I will ride them. But they can only ever reply that they've been using them for years."

THAT EXTRA 1%

Marginal but significant gains is not just a Team Sky copyright; "When I was younger

I always wanted to improve, so I always looked at position. There are many ways to do this, but I try to look at the overall picture.

"If you want to improve 1% on the climbs it's extremely difficult. To improve your power to weight ratio by 3% means a lot of hard training. But if you have a lighter bike and lose a few kilo's it's so much easier. This is why I want a light bike and light shoes.

"The next step was bike position; I wanted the most extreme seat to handlebar drop as I could get. I worked on that, and then went to the narrowest bars I could.

"This was a real fight, to get the mechanics to fit them. They wanted me on 44cm, so I started there. Then I went to 38cm, which were tiny. Everybody told me I couldn't ride on them; but I wanted to try.

"It was strange for the first five rides, but then you forget about them. Then all of my teammates started going narrow, and they got used to them – it's so nice to have small bars."

"They say that bars should be shoulder width; but when you watch most riders on the drops they drop their hands in, and that takes energy when it is supposed to be your "lazy position". Effectively, everybody actually rides a little bit narrower anyway, but with wider bars.

"Look at track riders; they all have narrow bars, and they produce more power than we do. It's not unworkable; it's all about being aero and getting those free watts."

COMING FORWARD

When you see his Ridley team bike propped up the first thing that you notice is its extreme saddle position; "My saddle position goes with my cleat position. My cleats are really far back. If you speak to a bio-mechanic or bike fit specialist they will



© STEVE THOMAS

forwards to help this all line up. Like this I still have exactly what the biomechanics say I should have (knee-axle alignment).

"I keep the same biomechanics and put the right pressure on the pedal when I want it, it's just further forward. It means that I put less weight and power down and produce more torque. If you speak to a mechanical engineer it makes sense, but it's very hard to measure. You can measure power output, but not how much energy the human is using to create it.

"If you look at time trial bike set ups, and also UCI rules on saddle position; a lot of guys complain about it, and think that the UCI know nothing. I think that there is a very good reason for the rule, and that they know that if your seat goes forward you

why we just shouldn't always ride in that (saddle) position.

"They say that this is not good for climbing, but when I do my intervals on a climb I do them standing up and sitting, and a lot of repetitive intervals so that I can get more data to compare. This sounds crazy, but sitting down in an aero position when doing strength work on a climb (which is the most difficult way to climb), well, on one climb I was consistently 10 seconds faster and 12 watts less compared to standing. This is at 8kph, so there is still an aerodynamic advantage there.

"Why do some riders climb better than others? We like to think it's about pedalling efficiency, but it's also about cadence. If you look at a big rider and tell him to climb at 400 watts it's easy, but ask him to ride at 120 rpm of the flat and produce 400 watts it's not easy, because there is no resistance on the pedal. It requires a lot to be efficient on the flat, but pedalling squares uphill it's easy."

"One of my old coaches used to make me do 420 watts at 120 rpm on a climb. I used to hate it. I could do it on a climb, so easy – maybe three sets of 10 minutes; but on the flat I just couldn't do it. I could not pedal. When you have a slow cadence you can do it because there is always resistance, when your cadence goes up on the flat there is a lot of lost and wasted power – which brings gearing into question too."

UNDER WRAPS

Overall the bike is far less than half of the factor when it comes to aerodynamics and efficiency; it's that huge body frontal area that is the real drag; "At HTC I was making my own jerseys. If you knew, you could see

[[Most old coaches and team managers do not believe in this, they do not like it, that's tradition.]]

have your classic position. So what I want is to have long cranks, to move my cleats back to effectively extend that lever.

"Normally you have your cleat under the ball of your foot, which should be on the axle. Having a longer crank arm means that your leg goes up higher, and down lower, and so does your knee. With the 180's you have more leverage going forwards, and less going back because you are more forwards. To keep the ball of my foot under my knee to achieve the classic position I moved my cleats back, and then brought my saddle

have an advantage.

"Why doesn't everybody do it? I think it's culture - it's cycling. A lot of cyclists don't like change. Sport directors and mechanics don't like change. A lot of other riders ask me about it, and you can see their heads go because it actually makes sense; it's not like I'm just talking rubbish.

"There is a slow change happening; you see a lot of riders using non-offset seat posts now, so everyone is going further forwards. Time trial bikes produce the most efficiency, and I don't understand



it. I had one of the first aero jerseys back in 2008, they were super tight. I also made them for other riders.

"My last hand made jersey was a one piece job with no seams. The company where I had them made hated me and my crazy ideas. When on the bike there was not one seam, just a stitch connecting it. It was the graphics that were really tough, as it had to look perfect – like the other team jerseys.

"It was all about aerodynamics, energy for free. I was training properly; it was just about fixing all of these little things to help make up those small differences.

"Now we use Bio Racer TT suits, which are really good, so I use them all of the time – you don't often see me in a regular jersey."

MIXING IT UP

Although many teams now also have a brief pre-season focus on core training, Adam has long since been mixing his preparations; "I like to do a lot of cross training, I think it helps me to stay fresh mentally as well as benefit me physically. For example this year I didn't ride my bike between the TDU and Paris-Nice, I just cross trained.

"I do a lot of extreme hikes (all year round). Sure I wasn't totally bike fit when I got to Paris, but physically I was just as fit, and fresher mentally. It only takes a short time to transfer that to the familiarity of cycling – as long as the race doesn't start with a TTT, that's tough.

"After the TDU I go back to Czech Republic, where I live; it's bad weather and usually snowing. I'm not going out on my bike in that – I cross-country ski and cross train. I can still do my intervals, endurance

CLOCKWISE FROM LEFT: Thinking logically, and sometimes going against convention can pay big dividends.

A close cut stem and a big front end drop - Hansen trademarks.

Speed suits are his call for even long road stages.

The famous Hanseeno shoes.

work, and I didn't grow up with snow so it's really fun too.

"Most old coaches and team managers do not believe in this, they do not like it, that's tradition. I have worked with coaches (Sebastian Webber) who agree with my ideas, and now the team realises that I will be prepared and so just leave me to do it my way. I don't have a coach any more.

"From a biological point of view training is training; you're using the same heart, the blood is still pumping through, the oxygen, everything is the same. But, what I should do is make the transition between this and racing a bit better; although I just want to enjoy it as much as possible while I can. And it works.

"I also try and convince myself that the more non-cycling training I do the more I will love being at races, and I can see that it's true by talking and listening to other riders. I love training, I'm getting paid to work out and improve my body – but most of them don't enjoy the training at



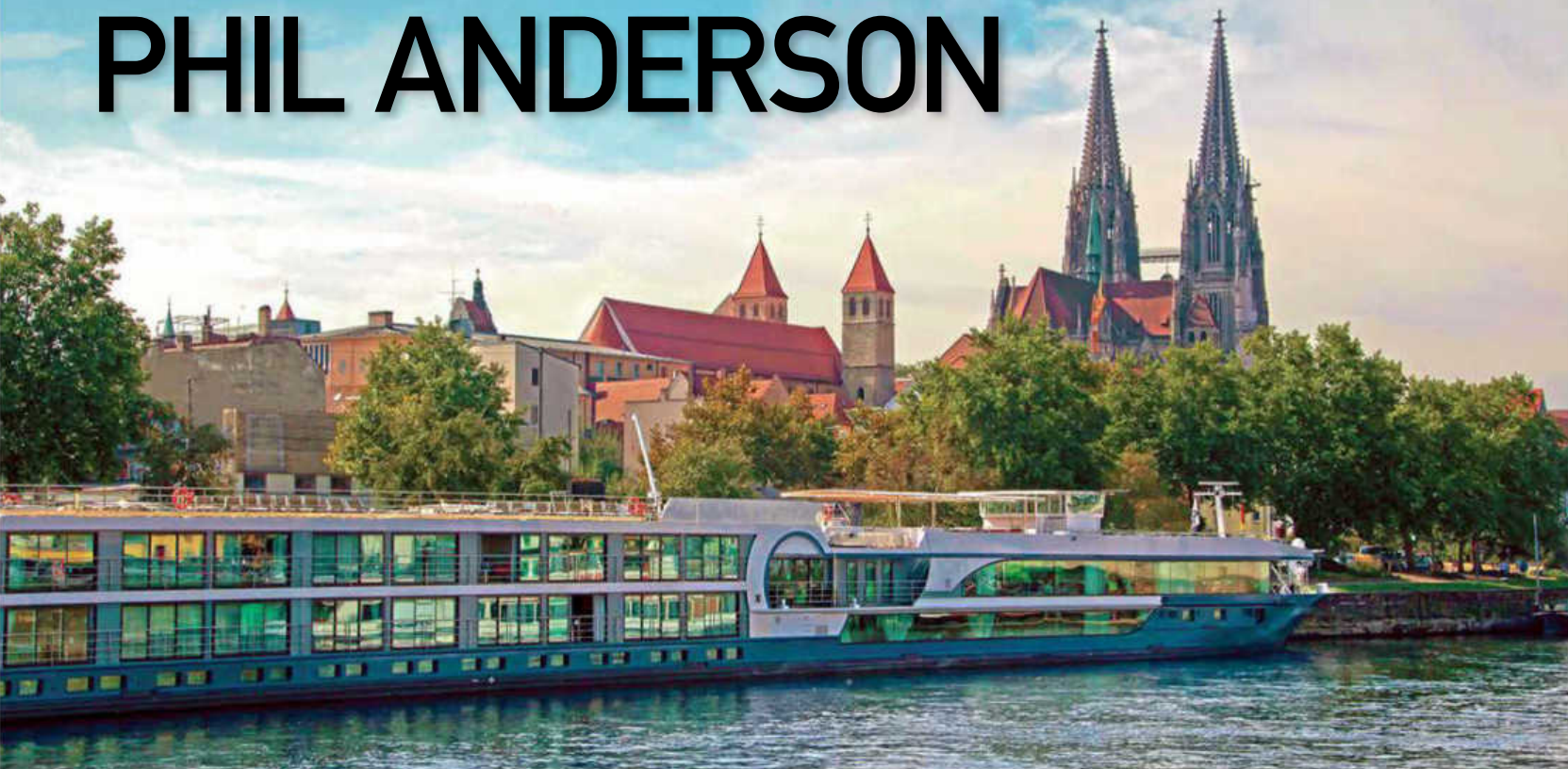
all, which is why many retire before they really need too."

STARTING WITH A CLEAN SLATE

Having no cycling ancestry to shape or jade his thoughts is a huge part of his success and approach; "Being an Australian we have no real culture, and everything is new. It's not that history is bad, but I think people do get stuck in the past, and cycling has so much culture, which is great – but it slows teams and progress down a lot. If you look at a team like Sky, nothing they do is about history; they're defining different ways.

"I think people really get stuck with learning new ways. If you're learning from a book then you are learning how to learn, and what to learn. If you have an entirely open mind and look at anything then you're open to new things and ideas. I'm always trying new stuff and experimenting on myself with this. There are other ways out there." 🌀

CRUISING WITH PHIL ANDERSON



IT'S THE AGE-OLD PROBLEM FOR THE DEVOTEE OF ANY SPORTING PERSUASION — WHO HAPPENS TO BE PARTNERED WITH ONE LESS ENAMoured OF SAID PERSUASION. HOW DO YOU HOLIDAY SO THAT BOTH PARTNERS EQUALLY ENJOY THE EXPERIENCE?



MANY A CYCLING widow, or widower for that matter, has endured holidays spent significantly alone, their hopes of an enjoyable time away dashed as they're woken by an early rising rider making haste to go and live the life of Riley. Adding insult to injury they may also suffer the lacklustre post meridian performance of that partner, subsequently exhausted from the morning's cycling revelry!

Aussie cycling legend Phil Anderson has no doubt been in this boat on occasion, but now he brings the solution—in a boat of an entirely different kind.

Working in conjunction with Reis & James Travel Associates and AllTrails Bicycle Tours, Phil is guest of honour on a unique European Cycling River Cruise from Budapest to Amsterdam, chartered exclusively for cyclists. It's a win win

situation for cycling couples and those less equally matched on the bike who love to get away from it all.

There will be seven rides planned over the 15 day duration of the cruise with something for everyone. For cycling enthusiasts, there are 50-85 km rides personally mapped and led by Phil Anderson, joined by Phil Liggett on one or two occasions. Phil Anderson is in great shape; looked like he just stepped off the bike when we saw him in Adelaide at the 2016 Tour Down Under, so you can be sure the rides will be tough enough for anyone looking to push themselves a little, but also a spectacular treat. You'll be accompanied by a support team and sag wagon so you won't be left behind.

For less hard core and more recreational riders, there are 15-20km rides that will be led by local tour operators, perhaps the perfect opportunity to go ride with your non riding partner.

KEY DETAILS

DURATION:

15 days, 14 nights. 7 ride days

DISTANCES:

50-85km, cycling enthusiasts, 15-20km, recreational riders

BIKE TYPE:

Road Bike or hybrid (hire or BYO)

TERRAIN:

Good bitumen roads – undulating

ACCOMMODATION:

4 cabin types still available – be quick

MEALS:

All included while cruising incl wine, beer, soft drinks with dinner

PRICE:

From \$8126 pp twin share AUD

DEPOSIT: \$500

VISIT: www.alltrails.com.au

CLOCKWISE FROM TOP LEFT: Cruise the iconic rivers of Europe in luxurious style with cycling legend Phil Anderson, and 'the voice of cycling' Phil Liggett.

You'll cruise through Hungary, Slovakia, Austria, Germany and Netherlands for 15 jaw dropping days.

Bring an extra memory card because the must do photo opportunities are plentiful.

You've seen and heard him on the TDF coverage for years; now meet Phil Liggett in person.



Riding is entirely up to you; get out and hammer, take an easy roll with your partner; you can even skip the organised ride and just enjoy normal touring off the ship.

Upon arrival there's a welcoming reception aboard your award winning luxury river cruise ship and the opportunity to meet your ride host and Aussie cycling icon, Phil Anderson. Tour staff will assist with bike set up, gear check and general information about the tour.

You can then expect a magnificent mix of sightseeing, gourmet food, and cycling as intense as you choose to make it — or equally, as relaxing as it can possibly be.

Starting out on the Danube in Budapest you'll immerse yourself in the river cruising experience, bask in coffee house culture or join the guided tour of the city.

The first ride will ease you into the Anderson experience while you get to know your fellow cyclists and the tour staff.

There's too much to mention here but you'll pass through havens of history and culture in Vienna, Passau, Nuremberg, Rudesheim and Cologne before reaching Amsterdam, 15 amazing days later.

The architecture, verdant hillside vineyards, historic Roman villages, espresso stops, museums and restaurants provide a magnificent tapestry behind the riding which will likely be the most familiar aspect of the tour but still quite something in itself. Your cruise ends with breakfast on Day 15, the day before the Tour de France begins. It may just be your best holiday together yet! 🍷



PHIL ANDERSON OAM

One of Australia's cycling heroes, Anderson wore the prestigious Tour de France yellow jersey an impressive 11 times, and continues to be at the forefront of the sport and is a patron of the Amy Gillett Foundation.

He won gold in the 1978 Commonwealth Games, turned pro and joined the intensely competitive professional European road circuit with a career spanning 16 years and culminating with another Commonwealth gold in 1994, the year of his retirement. Phil is recognised as a

cycling pioneer, well known for being the first Australian (and first non-European) to win the prestigious yellow jersey in the Tour de France. His daring challenge of the French favourite, Bernard Hinault created history, his exploits on the road, are stories full of pain, fierce determination and excitement. Ultimately, Phil Anderson wore the yellow jersey 11 times and rose to number one in the world in an era when Australia was not considered part of the cycling landscape.

MASTERCLASS

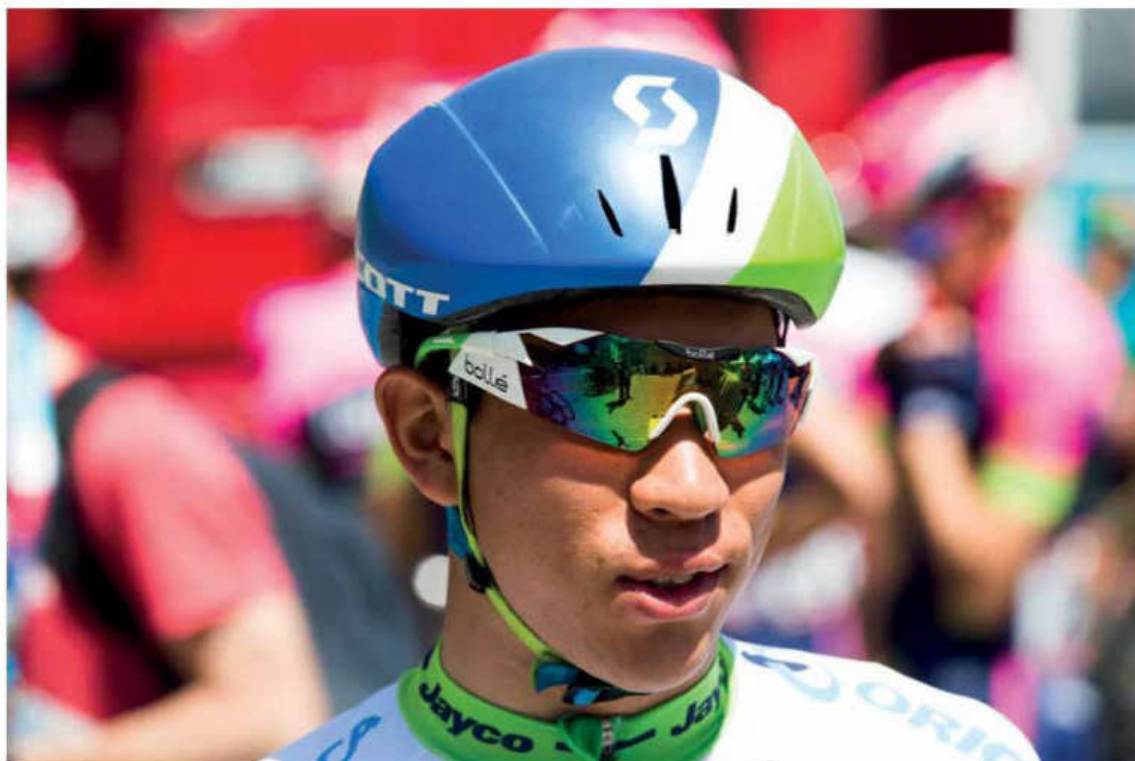
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Masterclass | Sprinting with Caleb Ewan

BY STEVE THOMAS



© STEVE THOMAS

Orica's Explosive Rookie: Caleb Ewan

CALEB EWAN IS POTENTIALLY THE HOTTEST PROPERTY IN PRO CYCLING RIGHT NOW. WE CATCH UP WITH THE ROOKIE SPRINTER TO SEE WHAT HE'S LEARNED SO FAR.

STEVE THOMAS



British born cycling nomad **Steve Thomas** has been racing and riding bikes since he was just 12 years old. During that time he's lived, raced and pedalled all over the world, and is currently Asian based. As a rider he has won on road, off road, and on the boards in international races, made TV documentaries, commercials, written books, and his words and images have appeared in leading cycling, lifestyle and travel publications for around 25 years.

HE'S JUST TURNED 21 years old and stands proud at five feet five inches tall, and he's already clambered onto more podiums than the president of the IOC. He is of course Caleb Ewan, the pint sized super sprinter from the Orica Green Edge team.

With a grand tour stage victory on top of a dozen more plus a couple of notable GC wins to his credit in his first pro season you could say that he's already staked notable claim to being one of the most victorious pro riders of the moment.

With his feet humbly affixed on the ground and his head far from the clouds, Ewan has all of the qualities a contender

for the world's next greatest sprinter could hope for.

We caught up with him to chat about his sharp but successful learning curve, and learned a fair bit about his approach to racing, and in particular sprinting.

STEPPING UP

The training hasn't been too much different. It's when you're at the races that things are really different; like the team will ask me to take it easy on the climbs in a stage race and just make it through within the time limit, where as before I would still be trying to be up there. Now when you reach the last climb it's all about easing off and saving

yourself for the next stage that you may have a chance to win.

At U23 level I would have been able to fight and still be in there, but at pro level it's different.

THE PRESSURES OF COMMAND

It is a little bit stressful, and obviously there's more pressure. I'm not quite used to it yet, because I never really had a lead out train before. I'm used to finding my way around the bunch and fighting for wheels.

Now it's a lot more structured. To come off a lead out you have to be a little bit stronger, and I'm still adapting to that. I think once the team nails the lead out



and I get a little bit stronger we'll be up there more.

RIDING A TRAIN

So far I think our lead out train is almost as strong as the major sprint teams, and even if the last 2-3 of us get dropped off early they know their way around the bunch really well, as the last guys have been sprinters themselves.

The guys who get us there are mostly strong time trialists, so they're super strong to keep me in position. If the team really wanted to dedicate everything to a lead out (as Ettix do) then at least half of the team are strong riders who could do that; but usually we also race with riders for GC.

LEARNING FROM THE MASTERS

The biggest things are when they go, when they wait, and

how they time everything. With different finishes, different numbers of riders and so on that stuff changes all of the time, so they never do the same thing again and again.

Wide roads, technical finishes; it's hard to pick up things and learn like that, as if you watch one day and then try to replicate the next it just won't work because everything is different.

HOLDING YOUR OWN

I don't really get intimidated, I guess they've been in my shoes before so they know that to get where they are that they had to go elbow to knee with the big sprinters of the day too, so when I do have physical contact I think they completely understand.

You do what you have to do to get into the right position, and that's sprinting.

I haven't really clashed physically with the likes of Cav or Greipel yet, and you just don't barge a rider off his own lead out train – that just isn't done. It's more the guys behind them who are fighting for their wheels that you tend to have issues with.

POWER TO THE PEDALS

Back in Australia, during my base season I did a lot of gym work. But when I moved to Europe that stopped, being the first time that I've lived alone in Europe. I've been busy setting up my own place and also racing a lot and training on the bike. Once things settle down more I hope to find a good gym and start training there again.

In the off-season I do a lot of dead presses and leg squats,

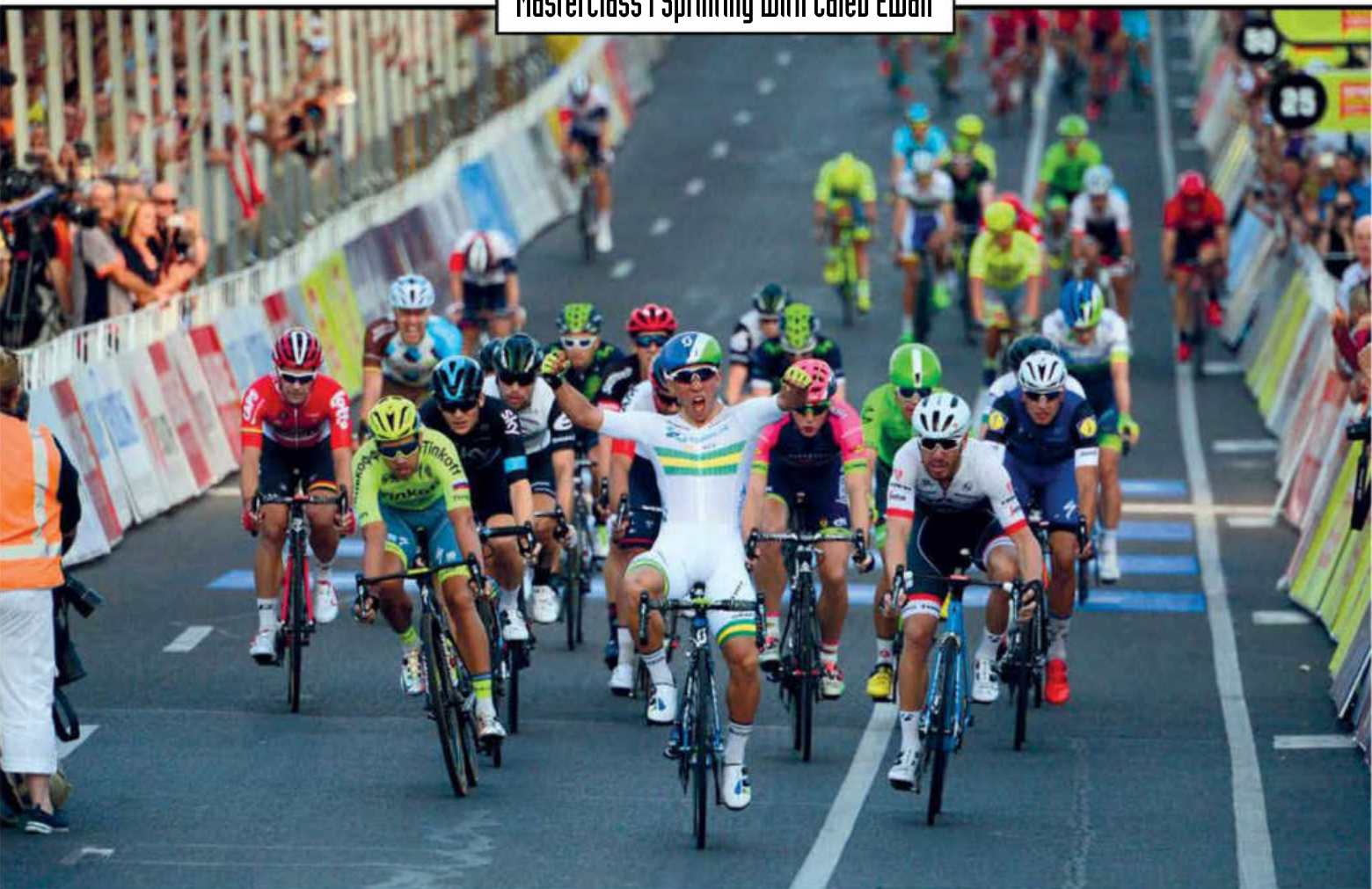
and I do feel that it really helps. The sooner I can start doing that the better – during the season included.

ON THE BIKE SHARPENING

I do a number of different things; high cadence sprints, I do a lot of these, especially during the season. When you've been doing a lot of racing and sprinting in a big gear your legs become heavy and sluggish, so I like to do this to keep spinning and fire my top end speed.

During the pre-season I also do bigger gear power-based sprint intervals.

ABOVE: "To the winner go the spoils". Ewan shared the podium with Brenton Jones and Athony Giacoppo.



© SIFOTTI

[[inside the last 50 k's it really ramps up and becomes flat out, especially for the last 20km...]]

already on the gas and then you still have to sprint.

As an under 23 you're still going hard for the last 15-20km, but when you get to the sprint you can still be pretty fresh.

that I can make it through two weeks and then three, although I'll probably still have a few bad days – I really have to learn management of this on the go.

FATIGUE FRENZY

We have a great team staff, and get a massage every night. When we get to the hotel there's always food, which makes it a lot easier.

Everyone fatigues as the races go on, so the racing does get a little easier. I haven't really gone through a full three week grand tour yet; so don't really know what that will be like.

During a one week race I usually have one day when I'm completely empty, as I get older and stronger I hope

IT'S NOT ABOUT THE BIKE

Nothing on my bike is sprint specific. I use the same bike for everything – no climbing bike or anything.

I do like to have quite deep-dish wheels, but that's about it.

THE THINKING RACER, A WORD TO THE WISE

If you're not riding the track then you should start. It teaches you positioning and also helps you and your sprinting a lot.

When I was younger I was always quite under developed compared to the other guys I was racing



© STEVE THOMAS

TOP: Ewan made the last 20 metres of the criterium look so easy.

ABOVE: The young star is well protected by his management team, with media, charity and extra curricular activities carefully vetted.

TAKING THE LONG ROAD

The big difference is that before we may have raced 150km, and it would be all go for the whole race. Now in the pro races it's really hard when the break is going, and then it will usually stop and cruise for a while. Then inside the last 50 k's it really ramps up and becomes flat out, especially for the last 20km.

Getting used to that flat out last part is really hard as you're

THE BEST COMPOUNDS



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RIGHT: Elite Men's Criterium Champion; has a nice ring to it.

BELOW: Commitment to winning through elite level sprinting will inevitably bring crashes.



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[[high cadence sprints, I do a lot of these...During the pre-season I also do bigger gear, power-based sprint intervals]]



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with, so I really had to think about what I was doing to be able to position myself to win.

I wasn't one of those big strong guys who could come from the back of the bunch on the last lap of a track race, so I really had to think and learn to race smart. As I got older things levelled out a lot, but I already had that knowledge and tactical sense which gave me a big leg up.

To the guys who are strong I'd say don't just sprint from the front because you can - think about it and learn. The young guys who aren't so strong to be able to win, then in many ways it's a bit of a benefit - because at some stage everything catches up and levels out, and if you've learned to race then you have a big advantage.

MIND GAMES

Now I'm pretty calm, but in the last 10-15k's of a race I'm a totally different person. You have to be really switched on and angry even, to be able to barge into people.

By then I'm usually really tired and people are pushing you off wheels and things are not usually going your way, and I get pretty angry.

You see a lot of sprinters who continue that after the race, and stay really angry and wound up. To get the best performance from yourself you really need to learn how to switch that off and have a normal life after racing.

It's the same with teams; they are different with this. After the race and at dinner we are all relaxed and just normal guys.

WHEN IT ALL GOES WRONG

When I make mistakes it really does eat away at me. If I've lost by making a tactical error it really annoys me. If I lose because I'm not strong enough then that's not a problem for me.

I think I'm learning fast, and with every race I learn from the experience. You have to learn from your mistakes, and it really does help to try and not make the same mistake again. 🌀



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spec as above
(USB) Charging Cable



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Rear Light
70 Lumens
Up to 10 hrs (Low)





To Push or To Pedal?

THE GREAT EDDY MERCKX WAS ONCE ASKED "EDDY; TO WIN RACES, IS IT BETTER TO PUSH A BIG GEAR SLOWLY OR A SMALL GEAR FAST?" SMILING, EDDY REPLIED "I THINK IT IS BETTER TO PUSH A BIG GEAR FAST!"

IS EDDY RIGHT?

Which is more efficient; to pedal at high cadence or to pedal at low cadence?

If you're a recreational rider, it probably doesn't matter because outright efficiency or power isn't your major interest. If you race or otherwise consider yourself a 'performance' rider then the answer is important. Let's look at a couple of examples of performance riding to see what we can learn.

The Hour Record is considered to be one of the toughest tests possible for a performance cyclist. Average cadence for successful Hour record breakers has varied between Graeme Obree's 95 rpm to a high of 104 rpm with the majority of successful attempts being at or slightly above 100 rpm. That cadence range would be considered as moderately high for a sustained effort by most cyclists.

Next, we have identical twins of the same weight, riding hard, side by side on identical bikes, on the same hill and at the same speed. By definition they must be producing the same power. In this example, Twin 1 is riding the big chain ring at 60 rpm while Twin 2

has selected the small chain ring and a cadence of 90 rpm. Which one will sustain the high intensity effort longest?

Intuitively, almost everyone answers "Twin 2" and they're right but why?

A lower cadence means a higher peak torque per pedal stroke. (Torque is the pressure a rider applies to the pedals x crank length. Power is torque x rpm.) A higher peak torque means a stronger peak muscular contraction per pedal stroke and the stronger the peak muscular contraction, the higher the production of fatigue metabolites. By way of comparison, the climber at 90 rpm has a much lower peak torque / peak muscular contraction per pedal stroke but that is partly offset by the greater number of pedal strokes completed during the same time.

So it appears that it is more economical to ride at a higher cadence. Scanning the research, this isn't necessarily so. There are a number of studies available that have concluded that low cadences of 50 -70 rpm are more economical than pedaling above 90 rpm. However, the common factor

[[to “pedal a big gear fast”
... low cadence intervals
are necessary]]



Steve Hogg is a Sydney based bike fitter with an international clientele. Steve has trained bike fitters on four continents and written extensively on bike fitting methods and principles.

amongst these is that the subjects of the study were either recreational riders or, if they were trained cyclists, the power outputs the subjects were asked to produce during the study were relatively low. That means for a performance rider, these findings are open to question.

In 2004 a trial was conducted, mainly in Spain, on pro cyclists using power outputs of 300 watts plus and some of it at above 350 watts. These are outputs that quality cyclists can sustain, not social riders. It found that the most efficient cadence tended to rise as power output increased, at least among highly trained and well adapted pro cyclists. It concluded that while there were individual differences, at high intensity, riding at 60

rpm is less efficient and more fatiguing than when pedaling at 80 – 100 rpm.

So it appears that Eddy was right. For best performance we need to pedal a big gear relatively fast.

While that's the case, the type of training a rider performs can move the most efficient cadence up or down the scale somewhat. We tend to become good at what we do and less good at what we don't practice. If you slug away all the time in the big chain ring you will become relatively strong, but lose the ability to

accelerate quickly. In contrast, if a rider pedals consistently at higher cadences they will improve their ability to do so but possibly at the cost of losing the strength needed to monster a gear when necessary. In an effort to nail down an efficient way to train for a typical time poor cyclist, I turned to Carl Paton, a Professor of Exercise Science in Napier, New Zealand who has vast experience as a cycling coach, racer and researcher.

Carl co-authored a 2009 study that appeared in the Journal of Strength and Conditioning Research entitled “The Effects of Low vs High Cadence Interval Training on Cycling Performance”. To summarise, a group of cyclists, each with a minimum of 3 years racing experience and in the middle of their competitive season were divided into matching pairs based on power output. Each rider of each pair performed the same 2 x weekly sessions of high intensity intervals, with the



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ABOVE: Chris Froome's high cadence delivers a high power to weight ratio, without the need for massive force on each rotation of the pedals.

LEFT: Trainers are great for warming up, but can also useful for training at set cadence and power output.

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difference being that the low cadence group completed them at 60 – 70 rpm, while the high cadence group pedalled at 110 -120 rpm.

After 8 sessions over 4 weeks, with a minimum of 48 hours recovery between interval sessions, improvements were noted in both groups. The low cadence group registered higher increases than the high cadence group in testosterone levels, power output, maximal oxygen uptake and a number of other factors. In most parameters measured, the improvement of the low cadence group over the high cadence group was significant.

Which leads to this: It

appears that for a trained, performance cyclist producing high outputs, pedaling faster at 90 rpm plus is more efficient than pedaling slower at 70 rpm or less. But to develop the strength necessary to “pedal a big gear fast” to use Eddy’s words, low cadence intervals are necessary.

For those interested, below is a 10 week program that Carl Paton prescribes to time poor cyclists who race while holding down a full time job and having all of the usual family responsibilities.

This program is for time poor cyclists, assumes a cycling background and no great tendency to injury. Be careful and use commonsense. 🧠

10 WEEK PRE SEASON PROGRAM TO INCREASE STRENGTH

You will need an indoor trainer with handlebar mounted resistance control or other means of massively increasing resistance; a 350mm – 400 mm high step or box and a pair of running shoes. For Weeks 1 – 4 & Weeks 9 - 10 elevate the front of the bike so it is 50 – 80 mm above horizontal and vary the amount of elevation above horizontal for each session. This will ensure that your relationship to gravity and hence, pattern of muscular enlistment, is similar to what it would be climbing a variety of gradients.

WEEKS 1—4

TUESDAY AND THURSDAY: 50 MINUTES

- Zero - 10.00: warm up at 70% of max heart rate @90 - 100rpm
- 10.00 — 14.30: 5 x 30 seconds on, 4 x 30 seconds off. The on 30 seconds to be in the biggest gear that can be pushed at the highest resistance level that can be managed at 60 — 70 rpm at maximum effort. For the off 30 seconds, switch resistance back to normal and change to small ring. Do not pick top gear for this. Use a higher resistance level on the trainer. Choose at least a couple of gears lower than top gear so that you have somewhere to improve to over the course of the program. If, because of fatigue, you can’t maintain 60 rpm, change down a cog. If you go above 70 rpm, change up a cog. Show some self-discipline with this and reap the rewards
- 14.30 — 16.30: Two minutes easy pedaling at any resistance and cadence that seems appropriate.
- 16.30 — 19.30: one minute to put running shoes on, one minute to do 20 x plyometric spring jumps on each leg [stand with one leg on 350 – 400 mm high block or step and leap as high as possible, taking off with the leg on the block. Repeat 20 times and then swap legs], then one minute to get cycling shoes back on and get back on the bike. Most will be able to do this in less than three minutes total and that’s fine. Get back on the bike earlier and pedal in an easy gear.
- 19.30 — 20.00: easy pedaling.
- 20.00 — 30.00: Repeat 10.00 — 20.00
- 30.00 — 40.00: Repeat again
- 40.00 — 50.00: warm down at 70% of max heart rate @ 90 — 100rpm
- Saturday and Sunday: Long rides of whatever distance @ 70% of max

HR and if you have to ride up hills do not go above 75% max HR.

The Tuesday and Thursday intervals, if performed conscientiously will take more out of you than you realise. If you have not totally recovered from weekend rides by Tuesday, you will find the intervals will suffer.

WEEKS 5—8

TUESDAY AND THURSDAY: 48 MINUTES

- Minute Zero — 10.00: same warm up as before
- 10.00 — 14.00: biggest gear you can push at the highest resistance @ 90 — 100 rpm. As before, don’t choose your highest gear so as to allow somewhere to improve to. If you drop below 90 rpm because of fatigue, change down a gear. If you end up pedaling above 100 rpm, change up a gear. Ideally choose a gear that allows you to complete the entire interval with EFFORT. This is far better than having to sequentially change down gears during an effort because you have chosen too hard a gear.
- 14.00 — 18.00: easy pedaling at 80 — 90 rpm in any gear that you choose but don’t let heart rate drop below 70% of max heart rate
- 18.00—38.00: repeat the 4 minute efforts 3 more times with 4 minute easy pedaling break at 70% max HR in between.
- 38.00 — 48.00: you have just finished your 4 x 4 minute effort. Warm down at 90 — 100 rpm at 70 % of max heart rate.
- Saturday and Sunday: Keep up the long steady rides at low intensity.

WEEKS 9 AND 10

SAME AS WEEKS 1 — 4

Now you should be in a position to go racing. Every 5 — 6 weeks during the season, take 2 weeks off whatever your program is and repeat 2 weeks of Weeks 1 - 4. This will ensure that power output continues to increase during the season.

TIP: During your recovery periods, it is a good idea to change into your ‘effort’ gear five seconds before the interval starts so you are primed to go and don’t have to waste time. 🧠

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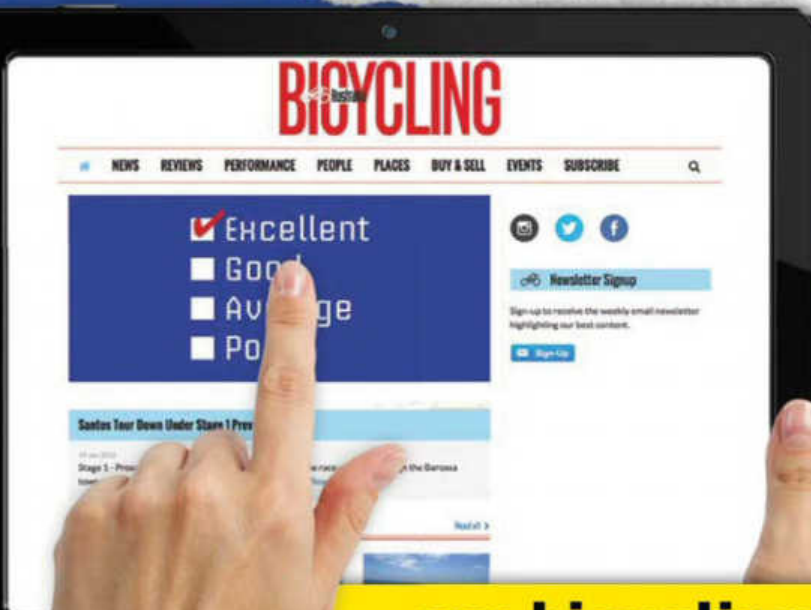
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The Truth About Stretching

RECENTLY THERE HAVE BEEN MANY ARTICLES CONCLUDING THAT STRETCHING HAS LITTLE PERFORMANCE BENEFIT TO ATHLETES. 'GREAT!', YOU MAY THINK, THERE IS MY TICKET TO NO STRETCHING! THINK AGAIN.

SARAH HUNTER



Sarah Hunter is a performance coach for FTP Training. She is a qualified Triathlon Coach and a qualified Personal Trainer. She has competed in Ironman triathlon, numerous multi day mountain bike stage races and TTs. She can also be found indulging in her other passions of surfing, kiting, swimming, running and lifting heavy things. She is based in Perth and can be contacted at s.hunter@ftptraining.com for more information on coaching and PT.

FOR MANY CYCLISTS, stretching is way down on the list of priorities. But despite the appearance of these pop media opinions that suggest an easy way out, I would argue that we are regular functioning people first, and cyclists second, and we therefore definitely have the need for some form of regular stretching in our weekly routine for a number of reasons:

1. Stretching helps improve poor posture.
2. Stretching can aid in pain relief in some circumstances.
3. Stretching may reduce risk of injury.
4. Stretching can improve mechanical efficiency and power output.
5. Stretching can improve range of motion and muscle stiffness.

Whilst you may not need to be able to wrap your feet round your head to ride your bike, you do need good range of motion and flexibility to ride efficiently and generate power. You need a good range of movement in the lower back to achieve a good TT position. Hamstring tightness can be another limiter in the ability for a rider to get in to a lower and more aerodynamic TT position.

A stiff lower back can result in overreaching, which in turn can lead to stiffness in the upper back and neck.

The pedaling motion on a bike has a small range of movement. The muscles used in a restricted range for long periods may tighten or feel uncomfortable, and these

tighter muscles may cause other aches and pains. The main muscles which have a tendency to become shortened as a result of repetitive pedaling action are the hamstrings and hip flexors.

Look at most cyclists and you will see one thing in common - their body is typically hunched over the handlebars for most of the ride. This places the lumbar spine (lower spine) in a state of flexion. Those of you who have a desk bound job may find that you have a less than perfect sitting posture, possibly slouching at your desk for up to eight hours a day - this also places the lumbar spine in a state of flexion. The lumbar spine naturally needs a variety of different postures to maintain good health. Generally speaking the lower back normally has a small arch in it - this is referred to as neutral spine. A neutral spine places the least amount of stress on the body and allows activation of the right muscles during movement.

Your tightest muscles may be hindering the performance of other muscles. The hip flexors are a group of muscles that are responsible for pulling the leg up towards the abdomen, core stability and power. These muscles are also used in everyday activities and are put in a state of excessive shortening by prolonged periods of sitting. Tight hip flexors reduce your effective reach on the bike, may compromise your TT position and may compromise your power output. Lower back

soreness can be an indicator of hip flexor tightness.

Hopefully by now I have convinced you that stretching should be part of your routine, but when should you do it and for how long?

WHEN TO STRETCH?

There has been vigorous debate about when to stretch - before or after exercise?

Stretching after your ride when your muscles and connective tissue are warm is the best time to include a static stretching routine.

The optimal time is immediately after you finish your ride and cool down, but if that is not possible, then within an hour after the ride, following a hot shower will suffice.

HOW LONG SHOULD YOU HOLD EACH STRETCH FOR?

At least 20 seconds, building up to 90 seconds once you can keep good form in the position.

The stretch should be taken to the point where resistance is felt, but no pain should be felt. If you do feel a sharp or intense sensation, then back off the stretch.

It takes 20 seconds for the stretch reflex to take place. The stretch reflex is an automatic response from the body, which is designed to protect the muscles and prevent damage. When the brain receives information that the muscle is being stretched, its automatic response is to contract the muscle to protect it from being pulled forcefully or beyond its normal range. It takes about

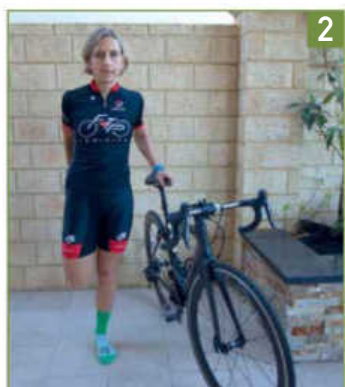
20 seconds for this signal to abate and for the muscle to lengthen.

It is important to NOT bounce during any of these stretches. Bouncing will increase the risk of injury to the muscles.



1. BACK & SHOULDER STRETCH

Hold on to your bike in front of you with your hands shoulder width apart. Keep your feet directly underneath your hips and a slight bend in the knees. If your hamstrings are particularly tight then maintain even more of a bend in the knees. Keep most of the weight on your feet and push the hips back as you extend the arms horizontally forward. Make sure the neck is in a neutral position looking down towards the ground.



2. QUAD STRETCH

Using your bike or a nearby wall for stability, with the right hand grasp top of the right forefoot and gently pull foot towards your butt. The quads are heavily used in cycling so it is important to go very slow in this stretch. Keep a slight bend in the standing knee. Keep the

knees together and gently push the hips forward. You should feel a stretch in the bent leg quad and the front of the hips.

Swap sides to repeat on opposite leg.



3. GLUTE STRETCH

Hold onto to your bike or a wall for stability. Stand tall and whilst bending the left leg, cross your right leg over your left, placing your right foot on top of the bent leg thigh. For some of you this might be as far as you can go. As you become more flexible you will be able to sit down and push the hips back. Keep the toes of the right leg flexed. Swap legs to repeat on opposite side.

If this stretch is too difficult then try the lying glute stretch. Start by lying on the floor on your back, with both legs straight. Bend the right leg and with both hands take hold of the knee and gently pull towards your shoulder. You should feel a stretch in the right glute.

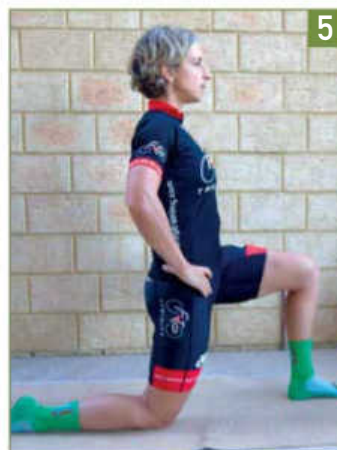
Swap legs to repeat on opposite side.



4. HAMSTRINGS

Place one leg in front of the other, front leg straight, back leg slightly bent and front foot flexed. Keeping your back in neutral position, push the hips back until you feel a stretch in your hamstring of the front leg. You do not need to sink down too low in this stretch. The stretch comes from pushing the hips back.

Swap legs to repeat on other side.



5. HIP FLEXOR

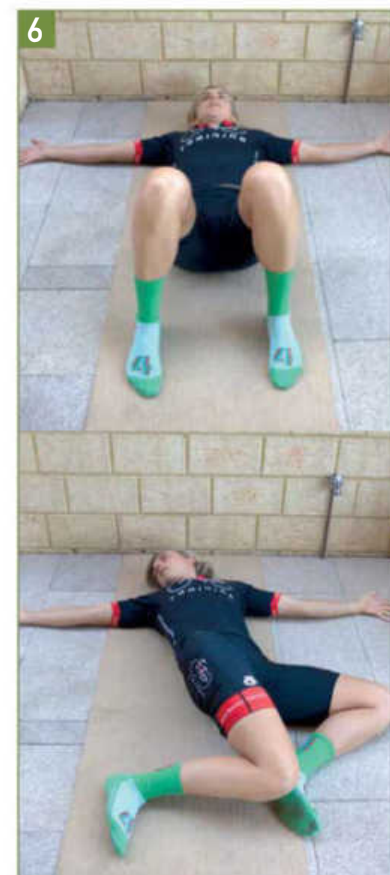
Get in to the half kneeling position with your left leg in front and your left knee directly over your left ankle.

Contract your abs and glutes at the same time – this will help get the pelvis into a posterior tilt position (which will feel like you are tucking your tailbone under). Keep your body tall. You should feel a stretch in the front area of the thigh on the bent leg.

Resist the urge to lean forwards in to this stretch; most people are too tight for this.

Guide your hips with your hands, with your fingers on the front of the hips and thumbs on the back. The posterior tilt action should make your thumbs move down.

Repeat on the opposite side.



6. SPINE TWIST

Spine twists help elongate and stretch the lower back, as well as stretching the shoulders, hips and obliques.

Start lying on your back, draw both knees in so that feet are flat of the floor, and just wider than hip width apart. Arms should be level with shoulder and palms facing up. If you have tight shoulders then move the arms towards the feet until both shoulders are comfortably flat of on the floor.

Let both knees gently drop to the left, keeping both shoulders on the floor. Look to the right.

This stretch can be performed with the feet wider than hip width apart – it will then focus the stretch on the hip flexors and hip rotators.

Repeat on the opposite side.

Macronutrient Mix

THERE IS PLENTY OF ATTENTION GIVEN TO EATING FOR RECOVERY, CARB LOADING AND HYDRATION BUT FAR LESS TO MACRONUTRIENT BALANCE. SO HOW MUCH CARBOHYDRATE, PROTEIN AND FAT DO CYCLISTS OF DIFFERENT LEVELS REQUIRE?



SUSIE BURRELL



Susie Burrell is one of Australia's leading dietitians with degrees in both nutrition and psychology. She has written three books including *Losing the last 5kg* and *Lose Weight Fast*, and has a nutrition practice in Sydney. When she is not writing or blogging, Susie spends her time thinking about eyelashes, Hawaii or her beloved Burmese cat Charlie. For more information see www.susieburrell.com.au

THE KEY NUTRIENTS

When we consume foods and meals there are three key nutrients that contribute to our energy or kilojoule intake - carbohydrates, proteins and fats. Different foods and food combinations offer different proportions of these macronutrients. A banana for example is primarily carbohydrate based whereas a mixed meal of a steak, potato and vegetables contains protein, carbs as well as fats found in the steak. As such, which foods we choose each day determines our overall intake of carbs, proteins and fats. Diets can range from high carb as consumed when we based our diet around breads, cereals, rice, pasta, fruits, starchy vegetables and sugars to high protein diets which

focus more on meats, fish, eggs and dairy or even high fat diets which utilise a high proportion of oils, nuts, seeds and proteins that contain fat such as oily fish, meats and full cream dairy at the expense of carbs.

CARBOHYDRATES

Carbohydrates are primarily found in plant based foods including bread, rice, breakfast cereal, fruits, starchy vegetables and sugars and offer 17kJ of energy per gram. The simplest form of carbohydrate is glucose and carbohydrates range from mixes of simple sugars to hundreds of individual sugars which form more complex carbohydrates such as breads and cereals. Carbohydrates can also be grouped according to their glycaemic index. The glycaemic index refers to

how quickly or how slowly a carbohydrate releases glucose into the bloodstream. Carbohydrate based foods that release glucose more slowly into the blood stream such as legumes, wholegrain bread and stone fruit are low GI foods compared to white bread, rice and tropical fruits which release the glucose they contain relatively quickly into the blood stream and are called high GI foods.

Traditionally it was recommended that active individuals primarily base their intake around carbohydrate rich foods simply because carbohydrates are the primary fuel for the muscle. As such, the more active an individual, the greater the amount of carbohydrate they will require to adequately fuel the muscle. Modern

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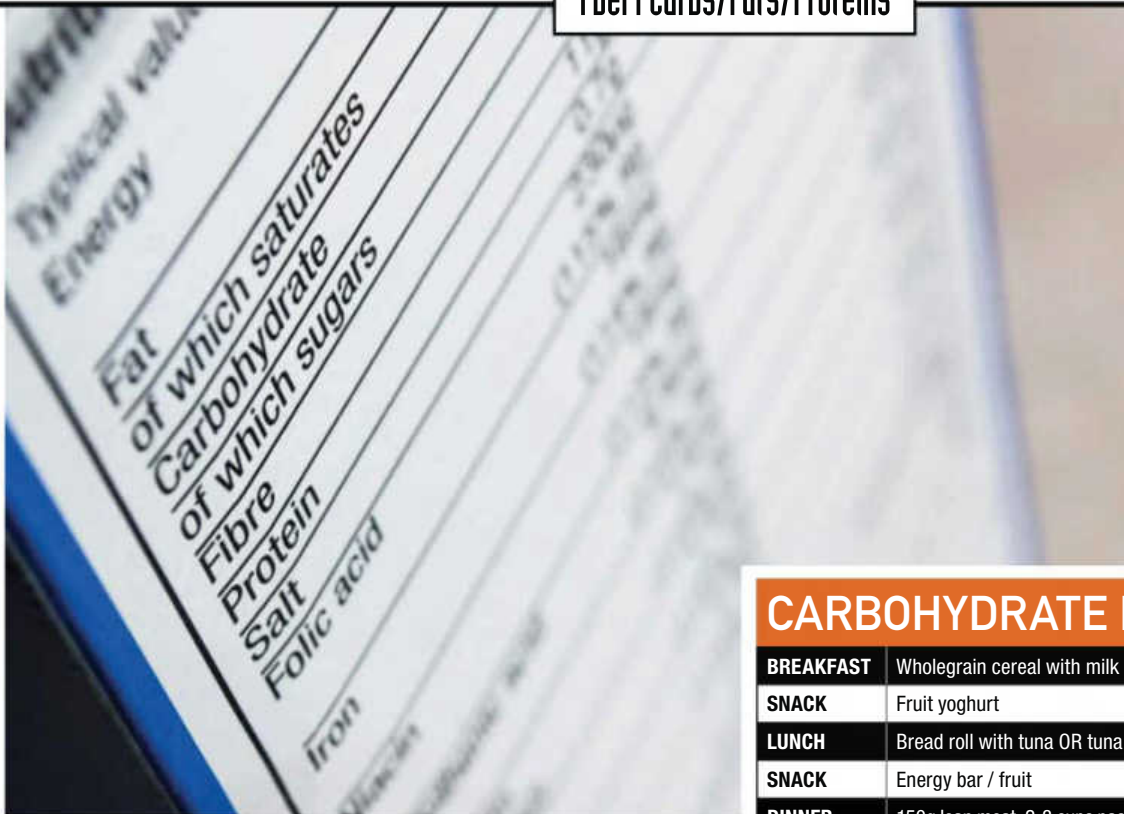
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thinking has changed in this view slightly as while individuals may be relatively active for some parts of the day, many of us also spend many hours sitting, which means our carbohydrate requirements are significantly reduced.

HOW MUCH CARBOHYDRATE DO I REQUIRE?

There is not just one rule when it comes to determining how much carbohydrate each athlete will require. It will change daily depending on training load, weight loss goals, movement and dietary preference. In fact, evidence based recommendations for daily carbohydrate intake range from as little as 3-5g per kilogram of body weight or 240-400g of total carbohydrate per day for an individual exercising regularly to 10-12g per kg for elite athletes training for 4-5 hours each day. In real life things are often very different and the average recreational athlete tends to report intakes of 200-300g of total carbs.

When working with clients, rather than provide a set prescription of carbs to be consumed I instead start with an assessment of how much my

client is already consuming, identify what their goals are for example increased energy or fat loss and then adjust the total amount of carbohydrates they are consuming based on these goals.

Another option is to count the amount of carbohydrate being consumed at each meal and snack. For active individuals, aiming for at least 20-30g of total carbohydrate at each meal and snack, especially pre and post training sessions will help to ensure your muscles always have a readily available supply of carbohydrate to fuel the muscle and aid in recovery post training. On the other end of the spectrum, if fat loss is the goal, reducing carbohydrate intake at the time of training is the worst thing you can do, as the active muscle requires a certain amount of carbohydrate to burn body fat. Rather slightly reducing your total carbohydrate intake from its baseline including a taper in which you consume more carbs in the first half of the day is the key to success. To determine how much carbohydrate you are consuming, simply download an online application such as 'myfitnesspal' which can calculate the total amount of carbohydrate quickly and easily.

CARBOHYDRATE MEAL PLAN

BREAKFAST	Wholegrain cereal with milk and a banana
SNACK	Fruit yoghurt
LUNCH	Bread roll with tuna OR tuna pasta
SNACK	Energy bar / fruit
DINNER	150g lean meat, 2-3 cups pasta / rice and vegetables
DESSERT	Fruit and yoghurt



SAMPLE 20G CARB (CHO) SERVES

- 1 medium jacket potato
- 100g sweet potato
- ½ corn cob
- ½ cup cooked rice
- ½ cup cooked pasta
- ¾ cup kidney beans / chick peas
- ½ cup quinoa
- 2 slices lower carb bread

SAMPLE HIGH CARB DIET

- 50-60% carbs, 20-25% protein, 25-30% fat
- Useful for - training >2 hours / day, high energy requirements, young athletes

PROTEIN

Protein is primarily found in animal based foods including meats, fish, dairy and eggs and in smaller amounts in some wholegrains and legumes and offers 17kJ per gram. Proteins are made from individual amino acids which combine together. Animal foods contain the full range of amino acids, which are easily used by the body while plant sources of protein including wheat and beans, contain some but not all of the amino acids, and hence need to be eaten in mixed

PROTEIN MEAL PLAN

BREAKFAST	2 eggs and 1 slice wholegrain toast
SNACK	Protein Bar
LUNCH	Salad with tuna and ½ cup sweet potato
SNACK	Handful of nuts
DINNER	250g lean meat, starchy vegetable and salad
DESSERT	Fruit and yoghurt

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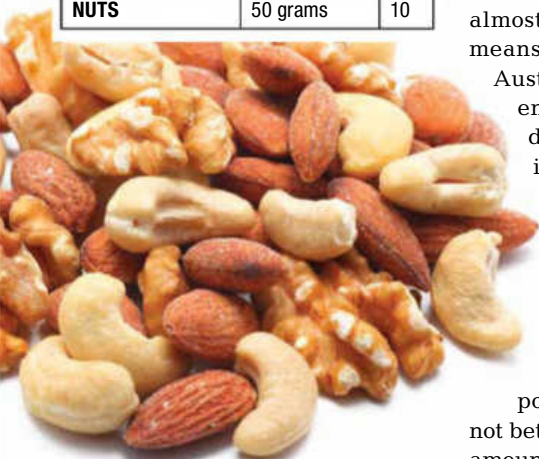


MAGURA

[[Less than 60-100g fat per day will potentially compromise the production of hormones, cell health, immune function and vitamin transport around the body.]]

PROTEIN COUNTER

BEEF/PORK/LAMB	100 grams	30
CHICKEN/TURKEY	100 grams	28
SEAFOOD	100 grams	20
MILK	250 ml glass	9
CHEESE	1 slice	5
YOGHURT	200 gram tub	10
RICE	1 cup cooked	5
PASTA	1 cup cooked	8
EGG	1-cooked	7
TOFU	100 grams	8
BAKED BEANS	1 cup	10
NUTS	50 grams	10



varieties for the body to get all the complete protein it needs. Proteins unlike carbohydrate primarily have a functional role in the body, building muscle and connective tissue, playing a key role in immune functioning and a number of other important roles in regulating metabolism.

As a basic requirement, adults require just 0.75g-1g of protein per kilogram of body weight, or 75-120 grams of protein each day for the average male. Since a small chicken breast contains almost 30g of protein, it means that the average

Australian gets more than enough protein in their diet. Naturally active individuals require more protein than sedentary people but still it is not difficult to get the amount of protein you need from your basic diet.

And contrary to popular opinion, more is not better. In fact, excessive amounts of protein will simply be excreted via the kidneys. For cyclists this means that aiming to include one protein rich food at each meal or snack will mean you reach a minimum of 75-120g of protein per day or 15-20% of total calorie intake. If your goal is fat loss or to simply keep your carb intake low you could increase the % of protein to 30% of total calorie intake simply by increasing your serving sizes of meat, fish and dairy during the day.

SAMPLE HIGH PROTEIN DIET

- Sample high protein diet ~ 30-40% protein, 30-40% carbs, 20-30% fat
- Useful for - training <1 hour per day, fat loss, sedentary lifestyles



FAT

While there is much hype about higher fat diets for athletes, for most of us rather than forming the basis of a dietary approach, fat has a functional and relatively stable role in the diet. Once you have ticked the box for your carbohydrate and protein requirements, the average active adult will require just 60-100g of total fat each day or 25-30% of total calorie intake. More than this, unless part of a specially formulated high fat dietary approach, will be stored, while less (than 60-100g) will potentially compromise the production of hormones, cell health, immune function and vitamin transport around the body.

Fat can be broken down into two main types, saturated fat and unsaturated fat. Saturated fat is found predominately in

animal based foods including meat and full fat dairy as well as processed foods such as including a number of biscuits, cakes, pastries and fried takeaway food. We require minimal saturated fat in the diet. On the other hand unsaturated fat, which includes monounsaturated and polyunsaturated fat found predominately in plant based foods including oils, nuts, seeds and avocados plays an important role in the body as a natural anti-inflammatory, and a key component of cell health. Ideally we need a 1:1:1 ratio between polyunsaturated, monounsaturated and saturated fats. This is easy to achieve via a serve of nuts, oily fish, a couple of tablespoons of olive oil and ¼ avocado along with minimal added fat from fried, processed and take away foods. 🍷

FAT

FOOD	TOTAL FAT (G)	SATURATED FAT (G)
2 SAUSAGES	26	12
TRIM MINCE (200G)	14	7
ATLANTIC SALMON (200G)	17	4
WALNUTS (10)	20	1
½ AVOCADO	27	6
TEASPOON OLIVE OIL	5	<1
2 SLICES CHEESE	13	8
GLASS OF LITE MILK	10	6
GLASS OF FULL CREAM MILK	4	1
BAG OF HOT CHIPS	25	12
NUT BASED SNACK BAR	10	3

ABOVE: Some fat in your diet, 25-30% of caloric intake, is an absolute necessity, but choose wisely.



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Cinettica Clothing

BEING HANDED A PAIR OF KNICKS AND A JERSEY TO TEST IS BOTH EXCITING AND A LITTLE DAUNTING. TRENT HEWITT TAKES ON THE CHALLENGE WITH SOME NEW CINETTICA.



THE EXCITEMENT OF getting some new clothes to wear, something that all your friends haven't seen on you yet is great. Fresh cycling kit is something that always feels nice too, smooth against the body. No wear marks or scars from day to day life.

The daunting part to this story comes from the fact that we all have our favourite kit. Just the same as we also have a favourite pair of jeans or tee-shirt. Come on, I even have favourite socks... Swapping 'old faithful' for a new brand that you have no history with is scary at best.

Cinettica is a brand that I have seen around in my local

one for me. They had the same rubber backing on them that the laser cut leg grippers had and as soon as you put them on, the feeling of the straps over your shoulders disappeared totally. They never moved or irritated me for the entire test. I even tried mountain biking in them, with a lot more upper body movement, riding the MTB sometimes shows faults in clothing that road riding doesn't.

With a fairly standard leg length and cut, the bibs were a great fit in my normal size. With summer upon us in Australia now, the open weave mesh panel running

[[I decided to forgo this luxury (chamois cream) and used the knicks dry. Not once did I regret this move...]]

shop, noticed on fellow riders a few times and browsed over the ads in a magazine or two but never actually handed my credit card over for. Exciting times were to come as I kitted up in the Cinettica Men's Bibnix and Racer Jersey and headed out on to the streets.

Checking the knicks out before the first ride the most noticeable thing about them was the laser cut shoulder straps.

I am used to having laser cut power band grippers on the bottom of my most expensive knicks but the idea of the shoulder straps being laser cut was a new

from your shoulder blades down the middle of your back was a welcome relief and the slightly tighter weave mesh in all other sections above the waist helped with heat transfer.

When the sun goes down and the lights come on the Cinettica use a strip of 3M reflective material on the back of each leg to keep the cars away. The reflective strip is only sewn on one side so as to let it move around slightly and reflect more light.

The chamois is one of the most important sections of your knicks and for a good reason too.

SPECIFICATIONS

RPP	Bibnix - \$ \$189.95 Racer Jersey- \$129.95
DISTRIBUTOR	Sola Sport www.solasport.com.au

This can literally make or break the enjoyment of riding. Good to see that Cinettica head to one of the well-known companies for this job. Elastic Interface make a large range of different 'pads' for specific cycling disciplines and some of the most well respected bicycle clothing brands sew in their pads to help keep us all comfortable for hours in the saddle. In this instance, it worked as the comfort of the chamois did not change even after several hours in the saddle. Being a user of chamois cream for longer rides, I decided to forgo this luxury and used the knicks dry. Not once did I regret this move, not even on a particularly hot afternoon. Definitely the sign of a quality garment.

The Cinettica Racer jersey blended well with the plain black knicks, with just a splash of white to break up the block of colour. Just like the knicks, the jersey is made using several different types of high stretch materials. Under the arms and the entire back are a made of mesh to help with heat management. With three standard mesh pockets and a hidden fourth sweat proof zippered phone pocket it ticks all the regular jersey boxes.

Cinettica have cut the collar in a way that even when it is zipped totally up there is no restriction around your throat. A nice touch is the small but smooth YKK zip. There is nothing worse than half way up a climb in the middle of summer and you need both hands too unzip your jersey. Then when the 'Cinettica' tab on the zip is released, the zip locks and sits secure against your body.

My only complaints would be that the rear phone pocket is zippered on the side so care must be taken when removing your phone as it may slip out when you are still unzipping, and the size of the Racer Jersey felt a little large. I was testing a medium jersey and I would be tempted to try a small on before I handed over the cash. Not something that I would usually fit into. All I can say is trying before you buy, as you do with normal clothing.

Overall, the Cinettica kit was a pleasure to wear with comfort and understated style, even gaining a few positive comments from fellow riders. Apart from the jersey being slightly larger than I would expect, there was not one issue for the length of the test. 🌀



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SPECIFICATIONS

WAHOO TICKR	RRP \$69.95
WAHOO TICKR X	RRP \$139.95
DISTRIBUTOR	www.wahoofitness.com

Tickr and TickrX



IN THESE DAYS OF TECHNOLOGICAL ADVANCEMENT NOW EVEN YOUR HRM STRAP CAN DO MORE THAN YOU MIGHT IMAGINE. LUKE MEERS TAKES A LOOK AT THE WAHOO TICKR AND TICKRX.

WAHOO TICKR AND Tickr x heart rate straps provide the a high level of functionality for those wanting to use their HRM in alternate ways or across multiple platforms. The core feature of both units is the dual band functionality transmitting data via both ANT+ and Bluetooth. This allows the straps to be paired with Garmins as well as Polar devices, smartphones, almost anything with the correct software. This feature is very handy, I used the Tickr connected to my Garmin cycle computer and also paired it to a Polar watch for running and even used the smartphone app when I ventured to the gym. It was very convenient to have one strap to do it all. Apart

from this the Tickr paired and behaved much like any other heart rate strap, with the useful addition of having indicator lights to show when you first put it on, that it is transmitting.

The Tickr X, brings a raft of additional features to the table. It includes built in memory, allowing workouts to be stored and uploaded later to the Wahoo app on your smartphone. This allows you to run (for example) without any GPS or watch devices

and still get data from your workout of duration, heart rate and calories burned. This is a handy feature for swimmers in particular because you can now record your swim heart rate. HRMs which rely on transmitting data in real time can't effectively do this due to the signal attenuating too quickly when underwater.

The wahoo smartphone app for ios and android is an easy to use piece of software and allows direct upload of workouts to third party applications such as Strava. Wahoo are very good at providing high levels of integration between devices, and the Wahoo app and Tickr X combination is no exception. The app also provides the smarts from which many of the Tickr X features can be utilised. These features include vibration alerts and the ability to control things such as laps and even skip songs by double tapping on the body of the HR unit.

The raft of features continue: the compact unit has accelerometers built in, allowing for a myriad of extra functionality. When cycling indoors, the app will give quite accurate cadence feedback. Similarly on the treadmill the distance and speed data can be estimated. The accelerometer can also provide three dimensional running metrics such as vertical oscillation, ground contact time and running smoothness figures. When paired with the Wahoo "7 minute workout"

smartphone application the unit can even provide rep counting for bodyweight exercises such as pushups.

This truly is a remarkable range of features, especially from a unit with an RRP of \$139.95. There are several limitations though. Whilst the unit has internal memory, to date Wahoo have not included the ability to record into this memory any data other than heart rate, and time. This means that while the Tickr X can give running smoothness metrics, only if you carry your smartphone with you. Similarly the features such as rep counting for cross training sound amazing but are currently limited to the specific workouts within the "7 minute workout" app. With time it is likely that Wahoo will provide firmware upgrades to improve the use of the technology and also that third party developers will create apps to use the accelerometer data in a larger variety of ways.

The Tickr X truly holds a huge amount of potential to add fun, useful data collection and analysis to athletes, particularly those who train across several sports. These features will only really become useful though as upgrades to firmware and smartphone apps better utilize what the hardware can do. Until then, the base unit Tickr is probably a better value purchase at \$69.95, giving the user dual band heart rate tracking in a comfortable and user friendly package. ●



ABOVE: The TickrX, not only carries a discrete distinguishing X on the front plate but houses the memory smarts to store your data for later, without the need for a smartphone or head unit during the workout.

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Test Lab | Catlike Mixino

BY LUKE MEERS

Catlike Mixino

HELMETS ARE, FOR MOST, A MATTER OF SAFETY FIRST, BUT BEYOND THIS—AND THE FROUGHT ISSUE OF AESTHETICS, THERE IS A RAFT OF FEATURES YOU MIGHT LIKE YOURS TO HAVE. TAKE A LOOK AT THE CATLIKE MIXINO.



SPECIFICATIONS

RPP	\$329.00
WEIGHT	240g (tested)
SIZE	Medium
DISTRIBUTOR	Apollo Bicycle Co

HELMETS: IT TAKES AN odd mix of features to have one which satisfies. These core features are often competing against each other. When evaluating a helmet the following features come to mind: safety, aesthetics, comfort, ventilation, aerodynamics, weight and price. Obviously the safety factor is the one feature which should never be compromised on. Thankfully the Australian Standards ensure that all helmets sold in Australia comply with a high safety level. The priorities in the other areas come down to personal preference. The Catlike Mixino provides an option for those who place a high level of importance on ventilation. The 39 vents included in the helmet are testament to the intent to provide class leading cooling. Simply having a lot of holes in a helmet does not guarantee good air flow. In the

Mixino, these holes match up with several internal channels to guide the air through the helmet and over the head. This design is effective; out on the road there is tangibly more air-flow through the helmet than most. This is certainly a great benefit in hot conditions and is perhaps due to the Spanish origins of the helmet (In fact, the Catlike helmets are still manufactured in Spain). The obvious downside of having such high levels of air flow is reduced aerodynamic efficiency. Catlike offer an additional aero helmet cover which can be purchased for those in pursuit of speed (albeit at the cost of dignity). A second (perhaps unwanted) effect of the 39 holes in the helmet is that they create a unique aesthetic. The Catlike helmets look very different to the majority of other models on the market. The design is

polarising, with some people liking the look and others comparing it to wearing a golf ball. Fashion is a strange and mysterious beast.

For me, the best feature of the Mixino wasn't the vents, but rather the fit and level of comfort. I find that helmets often feel like they are perched on top of my head. The Mixino has a deeper internal shape allowing the helmet to sit quite low on the head. There is an alarming lack of padding. Just two strips running along the central ribs and another across the front, which sits along the forehead. Despite the lack of padding, the helmet is very comfortable; the deep fit and well-placed straps mean that the minimal padding is just enough. The dial tension adjuster on the rear cradle is simple to operate. The cradle itself has two small pads which provide another minimal yet

effective contact area. These features combine to make the Mixino a highly comfortable and simple helmet to use. As a bonus (not sure if by design or luck) the outer holes at the front of the helmet are spaced such as to provide an easy yet secure positioning of glasses.

Whilst not aerodynamic, the helmet is admirably light weight. The medium size has a claimed weight of just 230g (Catlike 2016 catalogue). Although actual weight is more like 240g; still a good figure. Sported by the Movistar team, the Mixino is the top model in the Catlike road range. Wearing the same helmet as Alejandro Valverde doesn't come cheap. Retail price is \$329. This figure is on par with the top offering from its competitors, but if the looks appeal to you and/or you want a helmet that offers good comfort levels and maximum ventilation, then you could do much worse than the Catlike Mixino. 🌀

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**PROFILE
DESIGN**

Black Eye Bibs & Jersey

EVERY WEEK I DISCOVER MORE SMALL AND BOLD CYCLING APPAREL COMPANIES ON INSTAGRAM, AND I'VE NOW ADDED BODHI TO THIS FEED.



BODHI IS A RELATIVE newcomer to the apparel game. Their tag line is 'Worship Cycling', appropriate given their name and their Belgian home.

The Black Eye kit is their premium materials level and features a pro fit, priced reasonably at \$190 for the bibs

and \$170 for the jersey. Their Golden Eye range uses simpler materials with a more relaxed fit at a slightly lower price. The ready to go garment graphics refresh each season but the main focus is custom apparel based on the Black and Golden Eye garments. BODHI offers great flexibility in design and

quantities via their custom program, discounts for garments that you shrink out of or crash damage, and quantity pricing.

We selected our garments using the online sizing chart as BODHI is sold over the net direct from Presto Agencies in Australia. I was nervous when unwrapping the Black Eye bib shorts, they seemed far too small

in volume and length but my fear was unfounded. On they went, nice and snug but surprisingly willing to stretch, providing a nice long coverage extending down to just above the knee. The material used for the straps is soft with a firm stretch built in, and the actual bib rides higher up toward the navel and the lower back than many others



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SPECIFICATIONS

BLACK EYE JERSEY	RRP \$170.00
BIBS	RRP \$190.00
DISTRIBUTOR	www.bodhicycling.be

on the market. The leg grippers were snug without being too tight and are lightly grippy. BODHI uses a heavier lycra for the rear and inner leg, and a lighter perforated material for the outside of the quads which was cool to wear but marvelously compressive. An additional layer of fabric is stitched inside the rear panel to prevent unsightly riders crack. I felt like I was cocooned inside the Black Eye bibs rather than wearing them on the outside of my body.

The 532 Pad was derived after 532 days of testing. Foam Carving Technology tailors the shape and thickness which reaches a club-sandwich level 15mm at some points. The foam is high density and firm, it's easy to see through the top layer and identify the Foam Carved reliefs. It appears bulky but Bodhi nailed it for me, no loose slices of bread or bacon were squeezed out the sides when my derriere bit down on the saddle sambo.

I was very impressed by the Black Eye bibs. Your best kit always feels old and sloppy as soon as you put on a brand new set of bibs, but I also received a few new sets of premium World Tour team level bibs from another brand at the same time as the Black Eyes. BODHI's offering definitely won out. The BODHI branding is subtle enough that the Black Eye's can be worn with pretty much anything too.

The Black Eye jersey is equally tasteful. Simple colors and design add enough

personality without falling foul of the Fashion Police. The jersey uses four different fabrics. A superlight front panel, heavier but perforated sides and rear, lycra sleeves and collar and an elastic arm band. The Black Eye jersey can be summarized as cool, stretchy and definitely a race cut. The full length zip was welcome on humid days, although the zipper garage at the bottom was fiddly to circumvent when re-joining the zip, and the hidden zip did pop in and out of sight at various points in it's ascent from waist to neck.

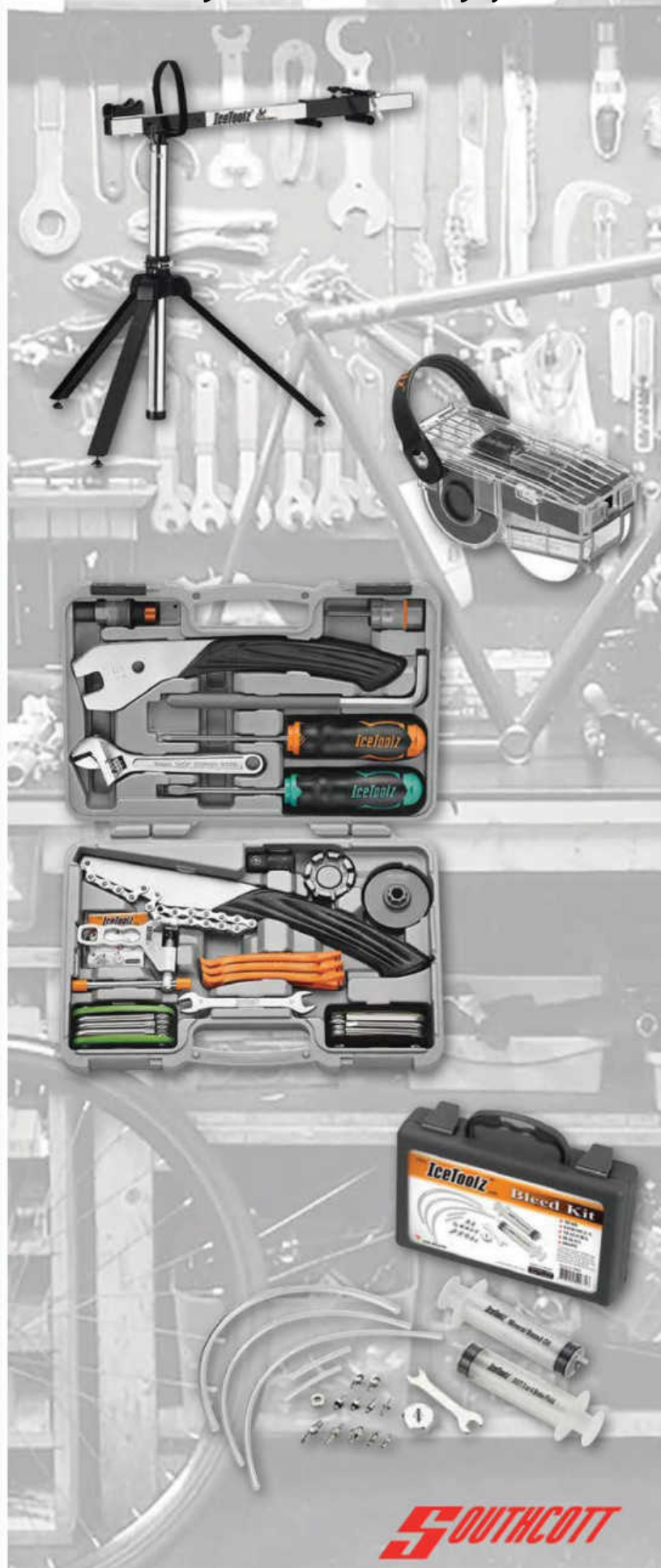
BODHI has opted for daily function even on this pro fit item, which lifts the appeal for the average Joe. The rear pockets are trimmed along their bottom edge with a reflective strip, and the centre pocket contains an additional zippered waterproof pocket which I used for keys, cards and cash. This allowed me to leave bulky wallets and pouches at home and freed up more space for food and warmers.

Having ridden this kit for a few months I'm certainly a fan. On close inspection there are a few spots where the stitching or cutting of the fabric isn't perfect; I've seen better, but this is splitting hairs. The fabric selection is great, the assembly solid, and the cuts and pad are on the money. The Black Eye garments are incredible value for money as an off the peg kit or as the basis for a custom team or club strip. 🌟



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SPECIFICATIONS

FRAME	Enigma Evoke, 3AL 2.5V titanium
FORK	Enigma C-Six disc
SHIFTERS	Shimano RS685 hydraulic levers and callipers
FRONT DERAILLEUR	Shimano Ultegra
REAR DERAILLEUR	Shimano Ultegra
CRANK	Shimano Ultegra
CASSETTE	Shimano Ultegra
BOTTOM BRACKET	Shimano Ultegra
WHEELS	Mavic Aksium disc
TYRES	Michelin Pro 4
BRAKES	Shimano Ice-tech (centre lock) rotors (160mm front, 140mm rear)
HANDLEBAR	Enigma double butted Aluminium alloy compact drop (42cm)
STEM	Enigma 3K Carbon
HEADSET	Chris King inset 7
SADDLE	Enigma Ellipse titanium rails
SEATPOST	Enigma Carbon (31.6mm) 25mm offset
WEIGHT	7.4kg
PRICE	\$5995, (Frame only \$3099)
DISTRIBUTOR	British Imports www.britishimports.com.au

7.4kg, 54cm,
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Attractive machining
on the dropouts
is a feature of the
Enigma range.

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a sharp looking ti frame
makes for a great all-day
high performance ride.

Enigma Evoke

QUALITY TITANIUM FRAMES POSSESS AN ALMOST MYTHICAL AURA CAPABLE OF SEDUCING EVEN THOSE WHO'VE NOT RIDDEN ONE. LUKE MEERS WITHSTOOD THE ENIGMA EVOKE'S SIREN SONG LONG ENOUGH TO FILE THIS REVIEW.

Mavic's Aksium Disc wheelset is a decent inclusion, but this bike will rock with some deep carbon hoops.

JUMPING ON A BIKE TO ride, evaluate and review is often a case of looking for very subtle, and let's be honest, sometimes irrelevant points of difference. This is a reflection of the way large bicycle companies and mass manufactured bikes dominate the market. It also is a symptom of a market where the product specifications such as geometries have been refined to a reliable (if boring) and narrow window. This mass production of carbon frames and groupsets is of a very high quality. Even middle and lower range bike models generally deliver a frame that is within 200-300 grams of the higher end models and often with identical geometry. Coupled with how well lower range groupsets such as the 11 speed Shimano 105 perform, the perceivable performance gap between middle to upper range models has become quite small. In contrast, putting a leg over the disc brake equipped, hand-built, titanium Enigma Evoke felt like simultaneously stepping backwards and forwards in time.

Enigma Bicycleworks are a small (ish) British company delivering hand-built (and potentially custom) titanium and steel framed bikes to the UK and Australian markets. They represent an increasing segment of the market stepping away from the mass produced,



1. Cable ties, perhaps not the most appealing fixture.
2. Extended machined dropouts provide mounting for the brakes.
3. Lots going on in the undercarriage, more lovely neat welds and lots of cabling.
4. 44mm headtube fits modern style forks.
5. The TIG welds are small and very very nice.
6. 160mm front rotor provides ample braking power.



manufacturers have utilised advances in tube forming techniques to allow for more exotic tube profiles and frame shapes. The Enigma Evoke, however, uses conventional tube shapes (with the exception of the chain stays), resulting in a classically appealing aesthetic. This is contrasted by the inclusion of the discs, which depending on your tastes either complements or detracts from the design. In this reviewer's opinion, the lines around the frame are left appealingly clean due to the lack of brake callipers and all of the rear cables being routed via the underside of the downtube. Frame weight comes in around the 1350 gram mark, a respectable figure for titanium. Enigma offers a range of customisations, including the type of finish of the frame and decals; even custom paintwork if desired. The real coup though is the ability to order complete custom frame sizing. This is something that mass produced carbon bikes cannot compete with. Custom sizing is particularly handy for those whose bodies don't

lie in the middle of the bell curve. Measurements and dimensions are taken here in Australia then converted by Enigma in the UK to give a CAD model of the frame and initial estimates of tube dimensions. These are then sent back to the distributor and customer for confirmation and potential modification before final dimensions are locked in for manufacture. This customisation increases cost by around \$800 AUD and adds an additional 6-12 weeks delivery, but that is quite impressive, especially when compared to the cost of some custom builds.

The Evoke tested here utilised Csix carbon forks seated neatly in a Chris King headset. Enigma branded saddle, seat mast, stem and bars were all well matched to the bike to complete a build which performs seamlessly.

The rise and rise of disc brakes for road bikes has accelerated over the last couple of years and the quality of hydraulic options from all three of the main groupset manufacturers have reached a high level. Whilst

in favour of custom and/or hand-built bikes. Titanium is the obvious material match for this part of the market too. Hand-built or custom designed frames inevitably carry a higher price tag and titanium allows ready modification of individual tube dimensions; provided the frame builder has the skill required. Enigma claim that frame builder Joe Walker is the leading expert of the TIG welding technique in the UK. Looking at the finesse and skill evident on the double butted joints of the Evoke, it is hard to argue. Which brings us to the appeal of hand-built titanium frames: they "evoke" (excuse the pun) a sense of boutique charm and attention to detail that is expressed from each hand assembled and artfully joined frame. The Enigma

Evoke frame combines this hand-built style with a few modern touches such as the oversized downtube and 44mm head tube which mates with current headset and fork styles. The bead brushed finish and understated Enigma logos combine to create a frame which looks classic yet modern and like it may even be quite fast. The rear dropouts are beautifully machined, nicely detailed and whilst not looking particularly lightweight, are designed to handle the majority of the rear brake loads, alleviating the stays. The dropouts incorporate a replaceable gear hanger and dedicated disc brake mounts reflecting a frame designed with disc brakes as an integral feature rather than optional addition.

Some titanium frame



[[...superbly comfortable, predictable and just plain fun to ride...]]

the suitability and necessity of discs for racing is still under debate, the endurance style of riding for which the majority of titanium frames are designed is well matched to incorporating the additional weight, cost and complexity. The Ultegra hydraulic groupset does not carry the price-tag of the Shimano flagship model, but always performs well. In fact Ultegra would certainly make the shortlist for the price/performance award amongst all groupsets. The hydraulic disc addition is fairly seamless too. Shifter size is comparable to the standard mechanical and electronic versions. Actual braking performance is superb. Nearly enough to convert the most hardened disc brake critic. On the Evoke, the rear disc is a 140mm diameter, with the front disc a larger 160mm for even greater stopping power and control. Whilst the current range of Shimano rim brakes, particularly the direct mount versions, perform impressively well; the hydraulic disc brakes provide improvement in almost every area. Stopping power is much more than required,

but when matched with great modulation, allow for new levels of braking confidence, not achievable with rim brakes. The question then becomes "do you need braking this good?". The downsides are the increased weight, in wheels, frame and the brakes themselves. On racing bikes, this critique could be understood, but on the Enigma, designed for a more luxurious performance, the compromise on weight is an understandable one.

So how does it ride? As mentioned at the start of the review, the Enigma provided the most unique ride of any bike I have tested to date. Not "unique" in the way you describe your child's "special" drawings either. The combination of well thought out geometry and the inherent compliance of titanium, make for a bike which is superbly comfortable, predictable and just plain fun to ride. The main critique would be that the heavy Mavic Aksium wheelset, whilst keeping the final price down, also acts to slow you down on the road, especially when attempting to accelerate

sharply. Once you filter out the dampening effect on the heavy wheelset however, the ride quality and performance of the Evoke is exactly what you would hope for in a bike that may last the remainder of your life. The frame doesn't exhibit excessive flex under load, yet provided the sort of comfort that made me want to ride it all day. My first two rides on the Evoke, whilst perhaps foolish, were both well over 100kms. Yet despite being new gear, and not totally fitted correctly for me, I returned home in comfort. Testament to the pleasure of titanium as well as the quality of the machine Enigma has created. Despite this fun, comfort and quality ride, I found myself yearning for that lighter wheelset which may have improved the sense of zip and agility of the bike.

When all's said and done though, titanium frames are said to be the bikes you buy for life. In the Evoke, Enigma deliver an affordable machine which would provide many a year of bespoke, hand-built, pleasure filled riding. 🚴

SUMMING UP

QUALITY

Enigma Evoke boasts some beautiful TIG welds. The frame is finished with the sort of attention to detail you would hope for in a hand-built titanium bike. The superb frameset is matched with a mid-range set of componentry.

PERFORMANCE

This is not a bike built with racing in mind. It delivers without fault in the endurance department though; silky ride, predictable and stable handling. It is a joy to ride. It goes fast when it needs to. A lighter wheelset would enliven the feel of the ride greatly.

VALUE

\$5995 may sound like a lot, but for a hand-built in the UK, Ti bike, this is very competitive. An extra \$800 or so for a fully custom build increases the value even further.

OVERALL

If you're after a titanium bike, enjoy long days in the saddle, grand fondos, or the like, the Enigma Evoke provides an affordable (in context) yet very impressive option. A high quality build throughout, with admirable design features and a classic aesthetic. This is a bike you want to keep on riding.

SPECIFICATIONS

FRAME	Izalco Max P2T 10 Carbon
FORK	Izalco Max P2T 10 Carbon T4
SHIFTERS	Shimano Dura Ace Di2
FRONT DERAILLEUR	Shimano Dura Ace Di2
REAR DERAILLEUR	Shimano Dura Ace Di2
CRANK	Shimano Dura Ace compact 52/36T, 172.5mm crank
CASSETTE	Shimano Dura Ace 11/25T 11-speed
BOTTOM BRACKET	Shimano
WHEELS	DT Swiss RC38 Carbon C tubeless ready
TYRES	Schwalbe One 622 X 25
BRAKES	Shimano Dura Ace
HANDLEBAR	fi'zi:k Cyrano R3
STEM	fi'zi:k Cyrano R3
HEADSET	FSA Orbit C33 SL
SADDLE	fi'zi:k Antares Kium
SEATPOST	CPX Plus Carbon, integrated Di2 battery
WEIGHT	6.6kg
PRICE	\$10,000
DISTRIBUTOR	Derby Cycles


6.6kg, 56cm,
\$10,000

The frame of
this bike weighs
in at a feathery
750 grams.

It's a dream build
really with full
Dura-Ace Di2
component set.

Focus Izalco Max 2016

IN THE QUEST FOR CYCLING SPEED AND PERFORMANCE JAKE LATHAM SET HIS SIGHTS ON THE FOCUS IZALCO MAX. AFTER SEVERAL MONTHS RIDING THE MAX HE PENNED THIS REVIEW.



RC 38 carbon wheels are a great match for a lightweight performance machine like the Izalco Max.

A MACHINE BUILT TO race, German manufacturers Focus designed the Izalco Max with speed in mind, it's a bike that gets moving and wants to push the limits.

I am fortunate enough to own this frame and there are a number of reasons why I picked it.

In a world where we as cyclists are spoiled for choice it can become overwhelming to think about all the possible options for a new bike, and that is exactly where I found myself.

I went with my instinct and purchased the Izalco Max Dura-Ace Di2 offering, the model near the top of the Focus Road Race range. It is well specc'ed with trustworthy parts I knew would perform without sparing too much expense. It comes in at a nice round figure of \$10,000, \$500 more expensive than the 2015 model but it does feature some slight component alterations.

Straight out of the box without pedals, the Di2 model with a DT-Swiss RC38 Spline carbon clincher weighed a measly 6.6kilograms. The full carbon 56 centimeter large frame weighs 750 grams on its own, making it one of the lightest production bikes on the market. Matched with their one-piece carbon fork weighing 295grams, this is one seriously light bike.

The frame features a tapered head tube with a 1



1/8" bearing at the top of the steering head and a 1 1/4" bearing in the bottom. This is to reduce the steering weight of the front end and create a stiffer, more stable ride when in motion. I could already notice the difference in the first ride when tipping the bike into a corner, the combination of the long 56.5centimeter top tube and the stiff, low front end made for confident handling, something you may not expect whilst descending and cornering on such a light bike.

The fork has been designed for maximum lateral stiffness, made out of a single piece of carbon it has the ability to absorb some of that annoying road buzz but be very rigid and precise when climbing, allowing you to dance on your pedals, effortlessly throwing the bike from side to side.

The other thing to mention when climbing is the great

power transfer through a very stiff bottom bracket. It is noticeably more rigid than my previous bike when out of the saddle or doing a big effort on the pedals, thanks to the frame size at the bottom bracket and the thick cylindrical seat tube. It also features SSPS technology designed by Focus that offers the same stiffness throughout their entire range by optimising tube diameter for each frame size to maximise the weight-to-stiffness ratio.

A classic looking frame without any fancy flair, the bike's aesthetic appearance understates its performance, though with just one colour scheme available for the Di2 model you aren't particularly spoilt for choice. A matte black carbon frame with white graphics is the sole option. The font used for this model's logo is quirky, it looks like it came off an early Macintosh computer screen.

The Izalco Max is a race-designated bike, built to allow you to ride fast and back up again and again with more performance.

The frame uses external brake cables for easy servicing. The rear brake cable sits under the top tube and while some people wax lyrical about the streamlined looks of internal routing my personal opinion is that it doesn't take away from the aesthetic appeal of the bike. The external routing also has a weight-saving benefit. Usually for manufacturers to internally route cables they must bore into the carbon and reinforce the opening with extra carbon, thus adding weight, but not so with the Izalco Max.

The guys at Focus have chosen to include with the bike a set of DT-Swiss RC38 Spline carbon clinchers which are tubeless ready,

so if you want to go down that road there's no initial need for an upgrade. This wheelset performs as a deep-dish carbon rim should, with lightweight handling, moderate stiffness, and reasonable speed...though it's difficult to gauge actual speed differences between different wheels, frames, and roads. But in saying all that these are a good option to have in the arsenal. They're not dramatically affected by side wind but they are quite narrow and have a V-shape profile rather than a U-shape.

Braking on these carbon rims was notably different for me when I compare with my previous alloy rimmed wheels, but less effective braking is a price you will likely have to pay with carbon rims. The Swiss Stop carbon brake pads are a nice touch and of course perfectly suited to the rims.



5



6

1. The alloy fi'zi:k Cyrano R3 bar and stem combo makes for stiff and responsive handling, and there is an opportunity to save weight by switching to carbon components if you are inclined to do so.
2. External brake cables make serviceability a breeze. It is a race-designated design that has accessibility in mind.
3. DT-Swiss carbon rims and lightweight skewers help keep the weight low, and aren't too bad on the eye either.
4. Shimano Dura-Ace Di2 is in charge of the shifting, with internally routed cables, the junction box is mounted underneath the stem and the battery is integrated into the seat post.



7

5. The tapered head tube is designed to lower the steering weight and increase stability and rigidity.
6. Attention to detail is very noticeable on this frame, right down to the chain stay protection cover that is glued to the chain stay and protects the frame from the consequences of chain suck.
7. The rigidity comes from the Stable Stiffness Per Size technology where each tube diameter is calculated depending on the frame size to deliver maximum stiffness without sacrificing comfort.

SUMMING UP

QUALITY

The attention to detail on this frame is immediately noticeable. Every aspect of the bike has been meticulously fasted over. It screams high-end European style with an even matte finish and its fluid curves; it's a modern tribute to the classic road bike frame.

PERFORMANCE

An all out race bike, it is stiff and responsive on the crit track but is really at home ascending in the alps where the weight, or lack there of, is a definite benefit. Add in the surprising level of comfort and you have a bike you would be happy to ride anywhere. Di2 always does its job precisely and promptly and is a great addition to this bike.

VALUE

At \$10,000 it isn't cheap, however for a top of the line race-ready bicycle it certainly feels like it is worth a lot more. A bike that comes standard with carbon rims is already ahead of the pack, reducing the initial need to upgrade a wheelset can save money and time. Reliable components make this Focus model a neat package for the price.

OVERALL

A-class handling and a round up of reliable components to compliment a very fast frame is the punch that this bike is packing. Personal touches and upgrades are only necessary if you are particularly picky about how certain parts feel when they are performing their duties, but the Izalco Max will dominate anywhere you choose to take it.

Shimano Dura-Ace calipers do the rest of the work.

The rims are wrapped in 25mm Schwalbe One tyres. There's no tread pattern but they're tacky enough to attack any corner.

The Shimano Dura-Ace Di2 electronic shifting is as reliable as always, with the junction box mounted on the under-side of the stem, and the battery hidden inside the CPX Plus carbon seat post. Speaking of which, the post features a gaping aero cutout just below the clamp.

A pro-compact 52/36T front chain ring ratio and 11/25T Dura-Ace cassette means this rig is ready to race, but if you want to go uphill a bit easier without grinding, swap the cassette for an 11/28T and leave the smaller ratio for the race track.

All the gear cables are internally routed through the headset to the rear triangle.

This model in particular comes stock with the alloy fi'zi:k Cyrano R3 bar and stem combo. The stem is thin and compliments the frame's classic shape and the bars are very stiff. I did find that the 44centimeter-wide bars were too wide for me and made handling feel sluggish. Changing to a narrower bar will speed up the steering response. There is also an opportunity to save a few grams with a carbon stem and narrower carbon bars.

The fi'zi:k Antares Kium saddle is a nice lightweight offering. Made of a full carbon body and alloy rails it is comfortable and has plenty of length to shift your weight forward and back during the ride, but because it is so flat I find myself squirming for relief after a while in the saddle.

Over the long term review period I have done a variety

of racing and training on the Izalco Max frame and have been impressed in every situation. I see the bike performing its best in a mountainous stage race, where the pressure is always on for those precious KOM points, however you don't need to be a racer to love this bike. It is great on the criterium track where it is nimble around corners and can hold itself in the sprints, but you could roll out of the race and continue to ride for a hundred more kilometers because this frame is just so comfortable.

It climbed superbly in the Adelaide Hills and up the side of Mt Hotham and I could not fault it one bit, regardless of whether I was seated or out of the saddle racing my friends and rivals. Don't underestimate the speed of this bike, it is born out of the quest for performance. 🌀

SPECIFICATIONS

FRAME	Modular monocoque carbon frame. Internal cable
FORK	Full monocoque carbon fork with carbon steerer, crown and dropouts. Tapered 1-1/4 to 1-1/8 steerer.
SHIFTERS	Shimano Dura Ace 9000 STI shifters
FRONT DERAILLEUR	Shimano Dura Ace mechanical braze on
REAR DERAILLEUR	Shimano Dura Ace mechanical
CRANK	Shimano Dura Ace, 53 x 39T
CASSETTE	Shimano 6800 11 speed 11-25T
BOTTOM BRACKET	Press fit BB86
WHEELS	DT Swiss R20 Dicut clincher wheelset. RWS Skewers
TYRES	Hutchinson Fusion 3 700 x 25
BRAKES	Shimano BR-9000 Dura Ace
HANDLEBAR	ITM Triango 31.8mm carbon wrapped bar
STEM	ITM Alutech 7075 3D forged 31.8mm alloy
CHAIN	KMC X11-L 11 speed
SADDLE	Prologo Zero 2 custom
SEATPOST	Factor Carbon 27.2mm
WEIGHT	7.16kg
PRICE	\$5,499
DISTRIBUTOR	Apollo Bikes www.apollobikes.com

7.16kg, 54cm,
\$5,499

The rear stays are very slender, reminiscent of the top end Arctec R.

Full Dura-Ace functionality in moving parts and fiscal restraint in the Ultegra cassette...again, a wise choice.

Apollo Elite

ONE OF APOLLO'S HIGH SPEC, HIGH VALUE RACE BIKES THE ELITE LOOKS CAPABLE OF COMPETING AT THE HIGHEST LEVEL. LUKE MEERS RACED THE ELITE IN BLISTERING HEAT AT THE TOUR OF BRIGHT TO PROVE ITS POTENTIAL.

Respectably light and unpretentious, the alloy rimmed R20s are a strong and smart spec on the Elite.

WHEN TESTING A racing bike, the ideal test is to race. That is just the treatment this Apollo Elite got during the 2015 Tour of Bright in the Victorian Alps. I received the Apollo about three days prior to when I was due to depart on the drive down to Bright. Usually test bikes take a few rides to bed them in and adjust bits and pieces, get the fit just right. On the Elite, however, I felt at home immediately and decided to do what is generally recommended against: ride a new, untested bike during a race. An ideal test ground for the Apollo to prove its worth.

First impressions often go a long way to determining one's thoughts about a test bike. Visually and on the road, the first ride provides the most ideas, sensations and observations about how a bike differs from others and what type of ride it delivers. The Apollo impressed immediately, the very generously proportioned downtube draws the attention, down towards the BB86 pressfit bottom bracket, surrounded by a mass of carbon. The tube profiles are overly square in shape. This is in contrast to many of the aerodynamically focussed designs currently on the market and highlights the fact Apollo have focussed on stiffness and dynamics above creating a slippery frame. The oversized downtube





[[very light and lively... superbly stiff out of the saddle...confidence inspiring on the descents...]]

and bottom bracket area contrast the spidery thin seat stays. A raw carbon finish and minimalist decals provide a reasonably stealthy appearance. Whether it was these positive initial visual impressions that made the first ride feel good or the ride itself, I'll never know. Either way, after the first short ride of 15km or so, the Elite gave me the confidence that it was a bike built to be raced.

A couple of days later it was packed up and heading down to Bright for three days of tough racing. The Tour of Bright saw the bike perform three quite different stages. In the first stage the road bike did its best impression of a time trial machine. The handlebars were dumped and some aero bars attached, deep dish Zipp wheels fitted and bottle

cages removed. Admittedly, the geometry of the Elite is not well suited to time trial adaptation. The headtube is relatively tall (160mm in the medium size). As such, the time trial position was a little higher than ideal. The square and wide down tube cannot be highly aerodynamic either. Regardless, the handling was predictable, even when down in the aero tuck.

Day two presented a mixed 90km road stage, requiring plenty of navigating within a peloton of 100 riders and finishing up with a 6km climb up Tawonga gap. The handling was predictable within tight bunch riding situations and the fairly standard tube angles and wheelbase provided a confident ride whilst descending. Additionally, much praise needs to be given to the

Dura Ace brakes. The latest offering from Shimano are certainly their best yet, with ample power and the right level of mechanical advantage to provide meaningful control.

The final, brutal stage, just 60 km, but the last 30 of which are ascending Mt Hotham; a climb taking the best part of 90 minutes. This undulating ascent is a genuine test of the climbing prowess of a bike. Whilst this rider's legs weren't quite at the level required to hang with the best on the climb, the Apollo Elite certainly did its part. The frame feels very light and lively. A flick of the finger on any of the main tubes of the bike delivers a noise identifying very thin wall sections. Apollo use polyurethane inserts during manufacture of the frame to control the

internal surface. Achieving consistent wall thickness gives greater confidence of the frame strength allowing the manufacturer to push the boundaries and reduce weight. Despite the wafer thin tubes, the Elite is superbly stiff out of the saddle, the generous dimensions around the bottom bracket providing the rigid base through which any power delivered by my legs was more than adequately transferred. Most of the Hotham climb was spent in the small Dura Ace chainring and either the 25 or 28 tooth cogs on the rear cassette. I had cited the tall head tube earlier. For the majority of riding, the 160mm length borders on too tall, but during the long Hotham ascent, the bit of extra stack was appreciated.

During all three stages the



1. Remove spacers to suit, inflate tyres, and race.
2. A burly BB area with external Di2 battery mount on the stay.
3. Slick internal cabling ports and very tidy tube junctions.
4. Wind up DT Swiss skewers for extra stiffness.
5. Loud and proud, and justifiably so the Elite is a strong contender.
6. Rear derailleur cable exits the chain stay very neatly.
7. A broad monostay and those slender seat stays gives a very minimalist feel.

SUMMING UP

QUALITY

The quality carbon frame is finished nicely. With a good set of components throughout.

PERFORMANCE

This is a bike built to race, the frame is light and lively. The BB area is bulky and very stiff. All parts of the machine gel together well and perform as a seamless unit.

VALUE

\$5.5k for a quality frame, Full Dura Ace, DT Swiss R20 wheels and carbon components. The Elite offers good value for money.

OVERALL

There was very little to fault with this bike. A great frame, and Shimano's trusty Dura Ace combine to create a bike which raced well on the flats, was a lively climber and confidence inspiring on the descents. Apollo have created a very good all round race machine.

shifting of the Dura Ace gears was flawless as you would hope for in the top offering from any manufacturer. The level of crisp and clear mechanical shifting achieved by Shimano in the 11 speed range provides a legitimate alternative to the more expensive electronic option. Apart from the need to replace cables once or twice a year, the mechanical Dura Ace would not leave you wishing for Di2.

At this stage of a review, I usually have some form of criticism to make. Usually a poor wheel choice or badly specified componentry. However, I could find little on the Elite which was not done well. The quality frame was well adorned in Dura Ace gear set, ITM stem and bars, Prologo Zero 2 saddle and Factor carbon seat mast.

The DT Swiss R20 Dicut clincher wheelset was also a good match. Perhaps it could be argued that for a bike as well specified as this one, a carbon wheel set would be appropriate. The DT Swiss wheels, however, performed solidly, feeling stiff and fast. The all round performance and training suitability of a good set of alloy clinchers is hard to argue against. At 1550g for the set, the weight of the R20s is respectable too.

The Apollo Elite first impressions were good. Good enough to give the confidence to race on this bike immediately. During racing it then delivered convincingly on what was first promised. Leaving no doubt that any lack of results was due to the form of the rider, not the function of the bike. It is a good all

round race machine, stiff, fast and lively. Spindly seat stays give enough compliance to keep you comfortable over longer or rougher terrain. The oversized and somewhat boxy tube design is admittedly not to everyone's taste, but it appealed to me. The Elite perhaps does not offer the "wow factor" or any attention grabbing design features that often adorn new bikes these days, but I appreciated the Aussie-style understated nature of the bike. This is a quality build, well spec'd, from groupset to wheels and at a retail of around \$5,500, it provides good value for money. Especially for those wanting to support an Australian company. It is a sad thing writing this review, because it means I now have to give the bike back. 🙄

SPECIFICATIONS

FRAME	SL4 FACT 10r carbon
FORK	FACT Carbon tapered 1 1/8 to 1 3/8
SHIFTERS	Shimano Ultegra Di2
FRONT DERAILLEUR	Shimano Ultegra Di2
REAR DERAILLEUR	Shimano Ultegra Di2
CRANK	Specialized Pro FACT OSBB, 50/34
CASSETTE	Shimano Ultegra 6800 11-28
BOTTOM BRACKET	OSBB
WHEELS	Specialized Roval Rapide CL40
TYRES	Specialized Turbo S-Works 24mm
BRAKES	Shimano 785 Hydraulic disc, 140mm rotors
HANDLEBAR	Specialized Expert alloy, shallow drop
STEM	Specialized Pro SL alloy
HEADSET	Cartridge bearing
SADDLE	Specialized Toupe Expert Gel, carbon rails
SEATPOST	Specialized CG-R
CHAIN	Shimano Ultegra 6800
WEIGHT	8.2kg
PRICE	\$8,999
DISTRIBUTOR	Specialized Australia


8.2kg, 56cm,
\$8,999

Once a novelty in
Specialized frames,
Zertz in the stays
and fork pass
almost unnoticed.

A 50/34 compact
crank and 11-28
cassette will make
easy work of any hills.

Roubaix Pro Race UDi2

DRESSED CRISPLY IN THIS WHITE TUXEDO WITH BLACK TRIM, OUR SPECIALIZED LOOKS AS DIRECT AS IT COULD GET, BUT THIS ROUBAIX IS NO BLACK AND WHITE, ONE-ANSWER MACHINE. PAT HOWARD FILED THIS REVIEW.



This fork uses a regular quick release, but 2016 models see the introduction of thru-axles on some models.

THE ROUBAIX NAME HAS been around for what seems like forever, certainly longer than any other comfort-oriented platform that comes to mind. For a while the term had some generic meaning, like Esky or Xerox. A 'Roubaix bike'. A bike designed to give a level of protection from rough and dead roads, and place the rider in a relaxed position to maintain greater control when fatigued or for riders that don't want the flat-back racer position.

The best long rides around my home are predominantly on dead road. My personal rides over the years have varied in comfort, most recently I've rolled bikes like the Trek Domane, Giant Defy, Cervelo R3, Specialized Diverge and Scott Solace over my these roads. I really looked forward to riding the Roubaix too, the granddaddy of them all!

The front triangle of the Roubaix is big and round, and houses a burly tapered steerer fork. The chain stays are far from meek in size. Only the tall headtube and signature Zerts frame inserts give this away as a go-long bike. The response from the Roubaix is firm at the bar and pedals. There's no problem muscling it into a turn or clenching the bars for an out of the saddle surge. The Roubaix is solid from front to rear, a bike that religiously follows its core strength and cross fit program.



The smoothness of the ride falls in a middle ground. It's hard to say whether the Zerts play a part, and same can be said for the funky looking CG-R seatpost, but the Roubaix takes the edge off the buzzy bits of the road without feeling soft. It's not the smoothest feeling machine in it's category but it's also more responsive than the silkier riding competitors. Hence the answer isn't black and white. There's more than enough muscle to get in and have a real crack on the Roubaix, but it will happily go all day too. It's solid enough that bigger riders can jump aboard and

not feel like they're riding an undernourished frame, which can't be said of all of the smooth-riders out there, especially so when attacking fast descents and corners.

The decision to Roubaix or Tarmac (Specialized's traditional race bike platform) could be a harder one that it seems on paper. The Roubaix has a slightly longer wheelbase (the chainstays are slightly longer) and a taller headtube, the idea being that as you sit higher your weight shifts backwards and hence a longer rear adds stability. I can ride most tall headtube bikes with the stem at the



1. Lots going on here! Zerts, discs, wires. Specialised brings it all together cleanly.
2. The Specialised stem comes with a customised mount for the Di2 junction box. A much nicer solution than the usual rubber band mounting.
3. The CG-R post is designed to act like a spring, providing a mild suspension below the saddle.
4. 40mm deep carbon clinchers add speed without mass. An ideal choice for almost all conditions.
5. The Roubaix frame will accept mechanical or electronic drivetrains
6. The Zertz inserts are designed to absorb small vibrations from the road before they can reach the rider.
7. Specialised cranks, wheels, tires and frame. The big S applies their resources liberally and with good effect.
8. Shhhhhpecialised. But the distinctive Zerts give it away!



[[It's not the smoothest feeling machine in its category but it's also more responsive than the silkier riding competitors.]]

very lowest and end up in the same position, or very close to, as I ride a shorter headtube bike usually (with one or two spacers under the stem). In direct comparison the Roubaix is stable and lacks the really fast and flighty feel of a dedicated race platform, but it rails big turns with casual ease and it certainly doesn't slow you down when you're putting in an effort. Riders that are happy to sacrifice a marginal amount of agility and snap can have a bike that can still deliver the power but can ride all day too. For many, that will be a faster bike.

Let's say the Roubaix is ticking the right boxes and we're looking over the range of different models. Our Pro Race Disc UDI2 is a lavish machine! There isn't much here to change, in fact it's hard to think

of any meaningful way to improve upon this spec. Disc brakes may still raise some debate, but this Roubaix uses regular quick releases and readily available hub widths (100mm front and 135mm rear), so compatibility is a non-issue. Swapping back to a mechanical shifting bike with rim brakes it was not the shifting that I noticed, but the inferior braking performance. Occasionally I was able to get the front disc to rub slightly when I was out of the saddle, but I didn't feel this was a real detractor.

The disc incarnation of the Roubaix also opens up tyre choice, up to 30mm. Our Specialized S-Works Turbo tyres were light and rolled quickly, but they also punctured frequently and collected plenty of cuts in the tread. We'd have loved to

see a 28mm tyre with a more general-purpose casing fitted as standard, as the stock tyres don't fit the smooth riding all rounder personality of the Roubaix. After riding the Specialized Diverge previously, the big tyres make a world of difference beyond any frame feature or carbon layup.

It's worthy to note that the 2016 incarnation of this model costs \$1,000 more and features through axle hubs, including a Specialized specific rear. No doubt the stiffness will improve and that front brake rub will likely disappear, but rear wheel options will be restricted. Quick release frames such as our tester are still in the lineup and it's hard to look at our test bike with its Di2, hydraulic brakes and carbon wheels, and not think that it's damn good option for most riding situations. 🍷

SUMMING UP

QUALITY

Specialized's in house components are a big business in themselves. The saddle, wheels and tyres are all top quality, as is the rest of the spec and frame.

PERFORMANCE

This is a fence sitter bike. It does it all, with no fuss. There is no obvious place to mark the Roubaix down.

VALUE

The Roubaix has the latest and arguably best performing drivetrain and brakes available, great wheels and an excellent frame. It is a big ticket item and some may feel it's expensive, given that there is still an S-Works level bike above this.

OVERALL

The spec is dialed and the performance is truly the embodiment of all-rounder. Discs will deter some, as will the relaxed fit. Otherwise, the Roubaix is unlikely to disappoint.

GEAR FROM THE TOUR DOWN UNDER

THERE WAS PLENTY OF ACTION AWAY FROM THE RACING AT THE TOUR DOWN UNDER. AS USUAL THE TOUR VILLAGE WAS A BUSTLING HIVE OF PEOPLE AND PRODUCT, HERE ARE JUST A FEW OF THE ITEMS ON SHOW.



LOOK ZED 3 CRANKSET

RIGHT: The LOOK ZED 3 is engineered to be the lightest and most rigid crankset on the market. The monobloc one-piece carbon composite construction is not only lightweight, but also aerodynamic and rigid. The 360gram crank, spider and axle are part of the monobloc construction and with a set of specific movements, the crankset can be installed onto the LOOK ZED specific frames, this could be why these frames have a 65mm diameter bottom bracket! They also feature a Trilobe nut that pivots to offer 3 separate crank arm lengths on the one crank.



VILLAGE

BELOW: Water fountains, food stalls and a big screen TV put a lid on the neat package that was the Santos Tour Down Under Village. Every day and evening the race and highlights were shown on the giant television in the village, so after the visitors had strolled around visiting all the tents they could relax with a glass of wine or a slushie to cool themselves down. In the heart of Adelaide's CBD it was the hub for all things TDU, it contained the pits for the athletes and was a short stroll away from their accommodation at the Hilton Hotel, it invited spectators and cycling fans into the gates, as well as passers by who were wondering what all the commotion was about. A great place to meet with friends and explore or to escape the heat of the day, at best under a big fan in some of the tents.



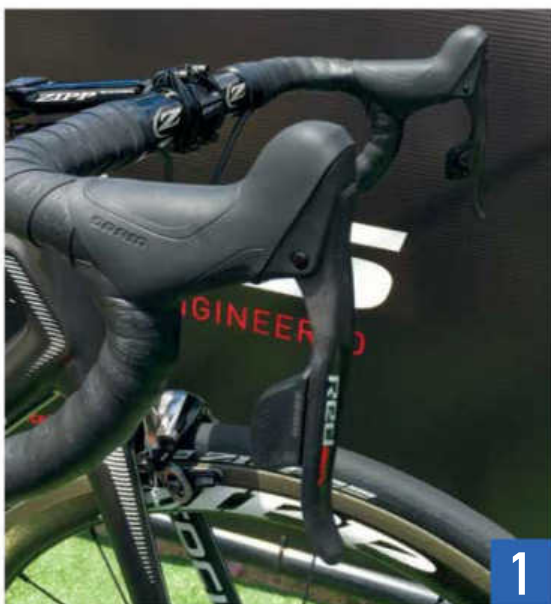
FACTOR

Factor Bikes had a prime spot down in the village for maximum foot traffic to introduce their bikes to the market.

TOP: One of Factor Bikes' interesting features is the split downtube that guides turbulent air off the front wheel through the frame rather than around a conventional frame. This design has been said to offer an aerodynamic efficiency of 100grams during wind tunnel testing, this supposedly gives an advantage of about one second per kilometer. It certainly got people talking about its quirky design at the Tour Down Under.

ABOVE RIGHT: This is the Factor One, an aerodynamic marvel that has been developed from the original Vis Vires frame, it feels super fast on the road but still offers a level of comfort. Don't be lead astray though, this is one stiff bike that springs out of the gate like a stretched rubber band ready to take flight.

LEFT: The advanced design of the new Factor One. It integrates technology derived from motorsports and aviation. With aspirations to create the most aerodynamic bike on the market, the Factor One features a unique integrated fork, stem and bar combo for maximum stiffness and aerodynamics.



FOCUS / ETAP DEMO

- 1** SRAM RED eTap is elegant and simple. The large shifter paddles take hints from motorsports and the updated shifting pattern is logical; right shifter makes it harder and left shifter makes it easier, designed to eliminate shifting mistakes.
- 2** The response from the derailleur feels crisp, with no guess work involved. The external battery mounted on the back of the derailleur does not seem as slick as the rest of the groupset but with no cables showing the bulky derailleur is a slight issue you would be willing to overlook.
- 3** This little piece of technology surpasses any of its competitors. The SRAM RED eTap wireless front derailleur gives you confident solid shifting every time and includes a removable battery mounted to each derailleur.

MAVIC SHOES:

LEFT: Mavic introduced their aerodynamic road race range to the punters at the Santos Tour Down Under village with these CXR Ultimate shoes, binding comfort and direct power transfer into a neat bumble-bee yellow bundle. The cloak surrounding the Ergo Dial lacing system has big open ventilation holes and a strong zip to save energy and reduce drag in full flight.



BELOW: The sleek design of the Mavic CXR Ultimate shoe features a rigid carbon outsole and an energy lock carbon heel to ensure maximum power transfer between the rider's feet and the pedals.





1



2



3



4

ROTOR UNO

- 1 Another first was displayed at the 2016 Santos Tour Down Under Village, hydraulic shifting from Rotor components. The dual chamber closed line system moves oil from one chamber to another during a shift where a spring in the second chamber pushes in the other direction, thus creating a shift between gears. The idea is that it eliminates things like cable stretch and has zero resistance unlike traditional forms of shifting.
- 2 Rotor are working to produce a drivetrain that will push the boundaries of design and performance

in the pro-peloton and that will trickle all the way down to the public market where it should be desirable due to low maintenance for crisp shifting in any conditions.

- 3 The Rotor Uno hydraulic drivetrain offers a nice feel when using the levers, it has a smooth activation and feels sturdier than a mechanical lever, it has a fluid no-catch shift throughout the movement and the hoods are quite comfortable. The Uno drivetrain isn't on the market yet but it is said to be competitively priced. A master cylinder is also found in the

hoods for braking and gear shifting, but has separate lines for each component.

- 4 Big shifting paddles of the Rotor Uno and hydraulic disc brakes make up this build an interesting one. We didn't see any WorldTour teams running this drivetrain at the Santos Tour Down Under but it has been spotted on the Team Dimension Data Cervelo S5 this season. Internally routing the hydraulic lines is no problem as it is not affected in the way mechanical cables get kinks causing inconsistent shifting.

MARATONA DLES DOLOMITES SPEND A WEEK IN CYCLING PARADISE



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Calendar, schmalendar...

DO THE WORLDTOUR RANKINGS MAKE SENSE TO YOU? MORE IMPORTANTLY, DO YOU CARE WHAT SOME COMPUTER-GENERATED ALGORITHM TOLD YOU ABOUT WHO THE BEST RIDER OR TEAM WAS LAST YEAR? IF YOU ANSWERED 'NO' AND 'NO', THEN YOU'RE NOT ALONE, WRITES ANTHONY TAN.

FROM 1948 TO 1958, there was the Challenge Desgrange-Colombo, named after Henri Desgrange, considered the founding father of the Tour de France, and Emilio Colombo, the La Gazzetta dello Sport journalist-turned-organiser of the Giro d'Italia.

The competition, organised by La Gazzetta, L'Equipe, Het Nieuwsblad, and the now-defunct Les Sports, was based around a points system, whereby riders would be awarded points based on their position in cycling's marquee events in France (Le Tour, Paris-Roubaix, Paris-Tours), Belgium (Tour of Flanders, Paris-Brussels, Flèche Wallonne) and Italy (Giro, Milan-San Remo, Tour of Lombardy). Events such as Liège-Bastogne-Liège, the Tour de Suisse and the Vuelta a España were added along the way.

A falling out between the newspapers led to the inception of the the Super Prestige Pernod International. Pernod, maker of the anise-flavoured liqueur that bears the same name, initially set up the competition in 1958 for French riders only, but the following year, the Super Prestige Pernod was open to internationals and awarded to the best rider of the year.

The series included the aforementioned events in

EDDY MERCKX, ALAIN SANTY, BERNARD BOURREAU lauréats des Trophées Pernod 1974

Pour la saison 1974, Eddy Merckx, Alain Santy, Bernard Bourreau ont remporté le trophée Pernod 1974, au premier rang du système professionnel. Son total de 455 points qui constitue la deuxième meilleure performance de sa carrière - son record 570 pts avant d'être battu en 1975 - représente un peu plus du double de celui de son second, Roger De Vlaeminck (225 pts).

Cette victoire n'est pas sans conséquence sur la saison 1975. Eddy Merckx, d'abord, stoppe sa participation au Tour de France, puis, le 22 mai, il se retire définitivement de la compétition et du tout fait, il se retire de la compétition. Il est remplacé par Raymond Poulidor, mais ce dernier ne peut défendre sa deuxième place dans les épreuves de la saison.



De gauche à droite : Bernard Bourreau, Bernard Thievaert, Eddy Merckx, Raymond Poulidor, Alain Santy.

Classement final du Prestige Pernod (1974)

1 - Alain Santy	455 pts
2 - Bourreau	205 pts
3 - J.P. Danguillaume	185 pts
4 - Thievaert	95 pts
5 - Merckx	85 pts
6 - Talmont	80 pts
7 - Bourreau	80 pts
8 - Danguillaume	80 pts
9 - Merckx	80 pts
10 - Poulidor	41 pts
11 - Ch. Raymond	40 pts
12 - Poulidor	22 pts
13 - Danguillaume	20 pts
14 - Roussel	18 pts
15 - Petit	17 pts



Alain Santy

Classement final de la Promotion Pernod

1 - Bernard Bourreau	142 pts
2 - Thievaert	142 pts
3 - J.P. Danguillaume	80 pts
4 - Santy	64 pts
5 - Roussel	48 pts
6 - Merckx	40 pts
7 - Conter	18 pts
8 - Bernard	18 pts



Bernard Bourreau, (au premier plan).

CLASSEMENT FINAL DU SUPER PRESTIGE PERNOD 1974

1 - Eddy Merckx	455 pts
2 - R. De Vlaeminck	205 pts
3 - Verbeke (B)	185 pts
4 - R. P. Poulidor	185 pts
5 - J. Zemanek	145 pts
6 - J.P. Danguillaume (F)	135 pts
7 - Santy (B)	130 pts
8 - J. Merckx	125 pts
9 - Leman (B)	115 pts
10 - Danguillaume (F)	85 pts
11 - Danguillaume (F)	85 pts
12 - Danguillaume (F)	85 pts
13 - Roussel (B)	85 pts
14 - Van Sprang (B)	85 pts
15 - Roussel (B)	85 pts
16 - Merckx (B)	85 pts
17 - Lopez-Carr (B)	85 pts
18 - Merckx (B)	85 pts
19 - Merckx (B)	85 pts
20 - Merckx (B)	85 pts
21 - Merckx (B)	85 pts
22 - Merckx (B)	85 pts
23 - Merckx (B)	85 pts
24 - Merckx (B)	85 pts
25 - Merckx (B)	85 pts
26 - Merckx (B)	85 pts
27 - Merckx (B)	85 pts
28 - Merckx (B)	85 pts
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46 - Merckx (B)	85 pts
47 - Merckx (B)	85 pts
48 - Merckx (B)	85 pts
49 - Merckx (B)	85 pts
50 - Merckx (B)	85 pts



Depuis la création des Trophées Pernod, Raymond Poulidor a toujours figuré aux places d'honneur. Au 1^{er} le premier.

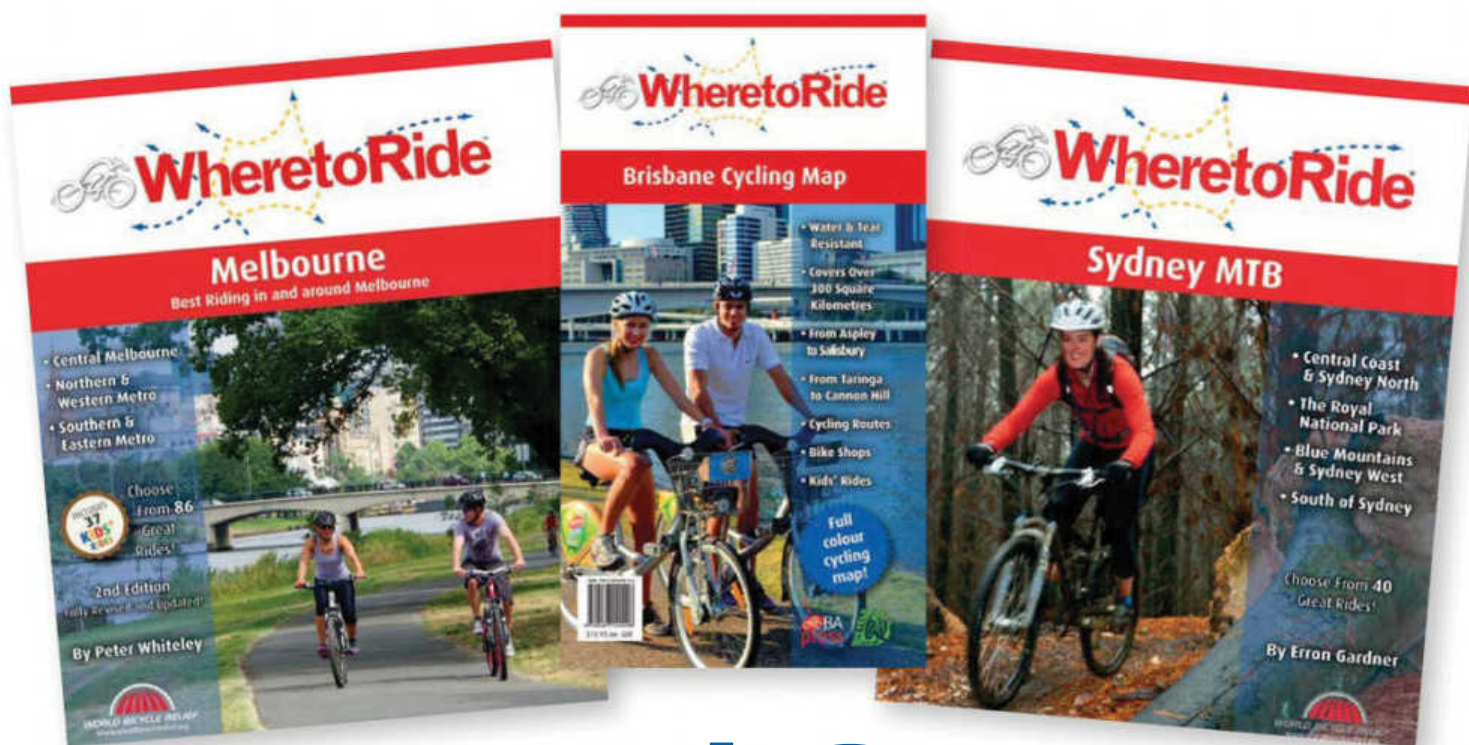
the Challenge Desgrange-Colombo as well as Paris-Nice, the Dauphiné Libéré (now Critérium du Dauphiné), Tour of Catalonia and the Tour of Romandie, making for a twenty-race competition. Only the top ten in each event scored points, with none other than the great Eddy Merckx winning the Super Prestige on seven occasions; Jacques Anquetil and Bernard Hinault won four times each, and Sean Kelly tasted success thrice. In its thirty-year history

Phil Anderson was the only Australian to feature in the top five, finishing third to Kelly and Hinault in 1984 - given the company he kept, not too shabby a feat at all, really. In 1988, when French law banned the advertisement of alcohol, the series became dead in the water, leading to the UCI Road World Cup. Bizarrely, the first UCI-organised competition chose to do away with stage races - although it was run in conjunction with

ABOVE: Who else but the Cannibal? Page 11 of the December 1974 edition of Miroir du Cyclisme, with the main picture showing Eddy Merckx receiving the Super Prestige Pernod trophy, identifying him as the best rider in the world.



Buoyed by the Olympic Games in his hometown of Sydney, **Anthony Tan** turned his back on a lucrative advertising career, choosing instead to meld journalism with his experiences as a handy road racer that took him to Europe - albeit briefly, and unsuccessfully. He has covered the Tour de France since 2001, and is a cycling analyst for SBS Television Australia.



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[[Previously, a place in the WorldTour guaranteed a place in the Tour de France - central behind many sponsors' decisions to invest in a top-tier squad. As of next year, that will no longer be the case.]]



ABOVE: Christian Prudhomme announces the route of the 2016 Tour de France: Share the Passion!

the UCI Road World Rankings, first introduced in 1984, which included almost every classified race on the calendar - and instead focus on twelve one-day races. There were nine staples: Milan-San Remo, Paris-Roubaix, Tour of Flanders, Liège-Bastogne-Liège, Amstel Gold, Clásica de San Sebastián, GP Zurich, Paris-Tours and the Tour of Lombardy. From booze to bubbly water, Perrier's effervescence underwrote the Road World Cup for the first three years, and the governing body introduced a fetching white leader's jersey with a vertical rainbow stripe that ran over the heart.

In 2005, outgoing UCI president Hein Verbruggen decided to create the ProTour in what he hoped to be a lasting legacy, creating a top division of twenty teams and including all three Grand Tours, the five Monuments and select other events, which the aforementioned ProTeams were obligated to ride.

Ostensibly, the aim was to globalise the sport. In reality, it was an attempt to gain greater control (notably of Tour de France organisers ASO), and consequently, a slice of the not inconsiderable revenue generated from the sale of broadcasting rights.

It failed, miserably. By 2008 all three Grand Tours had resigned from the ProTour, taking some of the biggest Classics including Milan-San Remo, Paris-Roubaix, Liège-Bastogne-Liège and Lombardy with them. It was a boon for the Tour Down Under, which became the first ex-European event on the calendar - but cycling's equivalent of the Formula One World Championship sans these marquee events?

It simply wasn't worth talking about.

And so, after four lacklustre years, the ProTour became the WorldTour in 2009. But for the first two years, race organisers ASO, RCS (owner of the Giro),

and Unipublic (Vuelta) refused to come to the party. In 2011 a truce was made and any event on the World Calendar was considered a WorldTour event; Philippe Gilbert (2011), Joaquim Rodríguez (2012-13) and Alejandro Valverde (2014-15) its champions since. Only problem is, creditable as their performances have been, no-one seems to have noticed - or, more importantly, cared.

Then, on December 18 last year, ASO slid a memo into the UCI's postbox in Aigle, Switzerland...

Amaury Sport Organisation has informed this day Union Cycliste Internationale it has opted for the registration of its events on the Hors Classe calendar for season 2017.

UCI has actually recently adopted, from season 2017, a reform of the World Tour calendar characterized by a closed sport system.

More than ever, A.S.O. remains committed to the European model and cannot

compromise the values it represents: an open system giving first priority to the sporting criterion.

It is therefore in this new context and within its historical events that A.S.O. will continue to keep these values alive.

"We refuse the closed system," Tour director Christian Prudhomme told AFP. "This will not affect the sporting level of our races. The champions will always want to participate in the best races."

Previously, a place in the WorldTour guaranteed a place in the Tour de France - central behind many sponsors' decisions to invest in a top-tier squad.

As of next year, that will no longer be the case.

Prudhomme not only harbours doubts about the UCI's proposed reforms - which include three-year licences and a maximum 18 WorldTour teams from 2017-19, and an expansion of the WorldTour calendar to potentially include races in the Middle East and North America - it also wishes to reduce the size of the teams in Grand Tours and other major races.

The governing body responded thus: "The UCI remains committed to implementing the (WorldTour) reforms which were agreed as part of this extensive consultation process and which the UCI believes properly balances the interests of all those involved in professional cycling."

Agreed by whom, exactly?

Any wonder why the layperson is so perennially cynical about the governance and credibility of the sport we love? Or that most corporate sponsors won't touch a cycling team with a barge pole? Or that besides the aficionados, most don't care about anything beyond the Tour?

Perhaps we should resurrect the Super Prestige Pernod. Unlike the WorldTour or the ProTour before it, riders and fans actually cared. 🍷



@anthony_tan



GRAN FONDO WORLD SERIES

UCI Gran Fondo World Series is the new name of the UCI World Cycling Tour in which amateur and masters' cyclists can qualify for the UCI Gran Fondo World Championships. If they finish in the first 25% of their age group, they are entitled to race for the coveted UCI rainbow jersey per age group. The series are accessible without a race license.

2016 CALENDAR

11-13 Sep 2015	Poznan Bike Challenge	Poznan, Poland
13 Sep 2015	Amy's Granfondo	Lorne, Australia
18 Oct 2015	Amashova Durban Classic	Durban, South Africa
11-13 Mar 2016	UCI Gran Fondo World Series Perth	Perth, Australia
2 Apr 2016	Forrest Grape Ride	Marlborough, New Zealand
22-24 Apr 2016	Rhodes Gran Fondo Tour	Rhodes, Greece
6-8 May 2016	Gran Fondo Denmark	Helsingor, Denmark
26 May 2016	Road Brazil Ride	Botucatu, Brazil
27-29 May 2016	Grey County Road Race	Blue Mt.Village, Canada
29 May 2016	L'Albigeoise	Albi, France
4-5 Jun 2016	Tour of Cambridgeshire	Peterborough, UK
10-12 Jun 2016	Maraton Franja	Ljubljana, Slovenia
10 Jul 2016	Niseko Classic	Niseko, Japan
15-17 Jul 2016	La Leggendaria Charly Gaul	Trento, Italy
1-4 Sep 2016	UCI Gran Fondo World Championships	Perth, Australia

QUALIFYING EVENTS FOR 2017

10-11 Sep 2016	Poznan Bike Challenge	Poznan, Poland
11 Sep 2016	Amy's Granfondo	Lorne, Australia

Beware of the Giant Penguins

ENDO MUSES OVER THE SPONTANEOUS SPLUTTERINGS, SEABIRD CALLS AND UNTOWARD ACTIONS OF CYCLISTS IN HIS BUNCH; THE OLD CRANKS.

ANY PUNTER OF THE peloton worth his or her weight in tubs of chamois cream has, at one time or another, pedalled so hard and deep into the red zone that they have involuntarily displayed a previously unearthed talent for making animal noises.

My moment arrived on a hill on the outskirts of Port Elliot about 71 miles into this year's Tour Down Under Bupa Challenge. As I punched the pedals in a mild state of delirium, a compassionate compadre eased up beside me. "Hey mate, are you

alright?" he enquired in the sincerest of tones.

"Yes," I grunted. "Why do you ask?"

His response was honest if somewhat lacking in sensitivity: "You sound like a 350 kilogram sea lion in mating season. Have you ever been to Kangaroo Island? Quite beautiful. You really should go."

In my bunch, The Old Cranks, the specialty is the bird call.

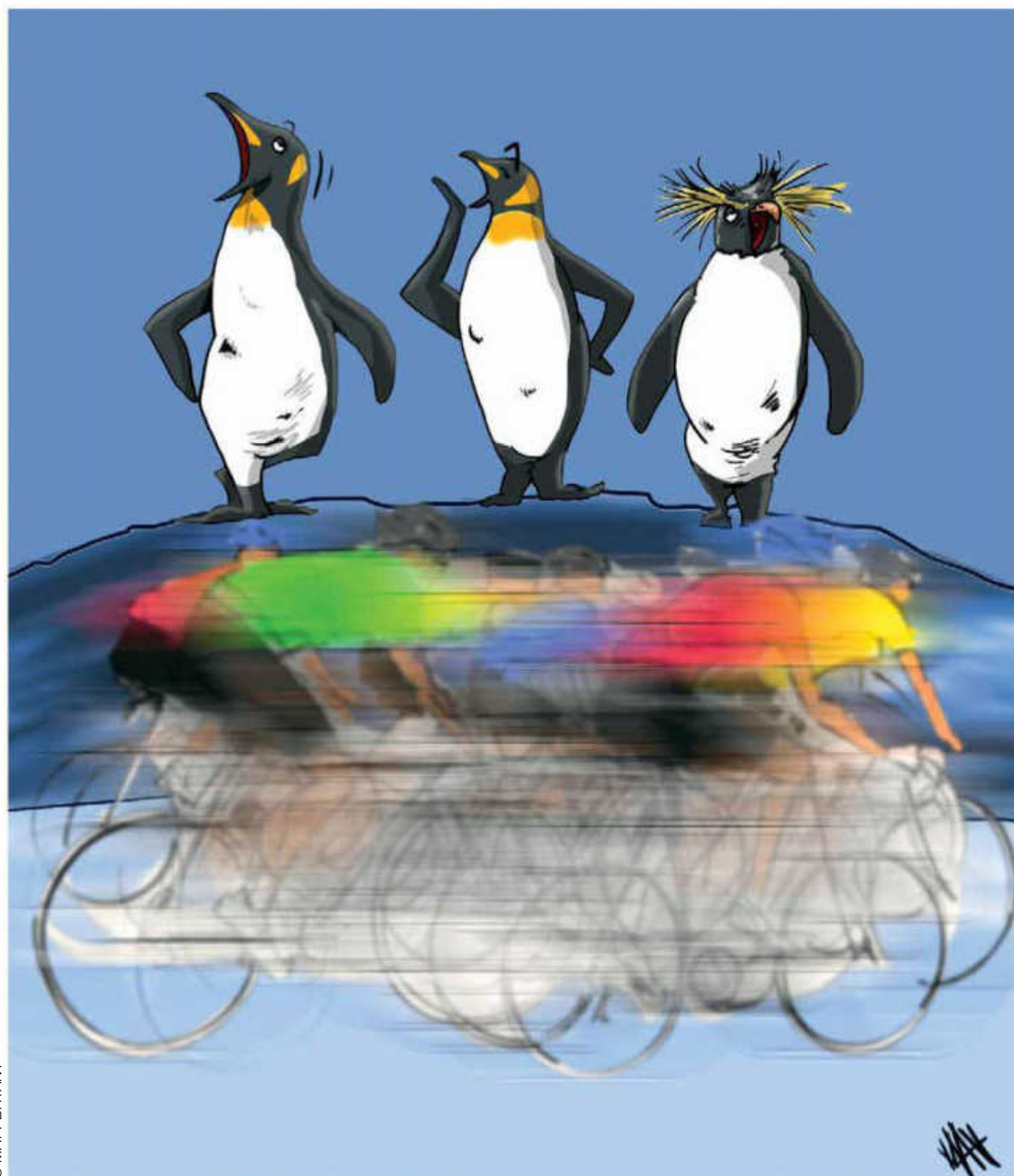
At that critical moment when you physiologically kick over from your aerobic to anaerobic energy system, Tezza gently and repetitively hoots like an owl.

In the seconds after hitting his VO2 max, JT McNulty lets out an erratic combination of "oohs" and "ahhs" that sound like a Kookaburra rolling around on the side of some remote highway after being clipped by the family station wagon.

And despite his self-proclaimed status as the mongrel dog of our bunch, Miguelito "El Dingo Loco" de Pared forgoes primal howling for the slightly more hilarious release of a long and heartfelt Graham Kennedy crow call. My editor knows his readership and has assured me that this example needs no further explanation.

Of course, there is another bird of a particular kind that can be found in the habitats that surround events like the Tour Down Under. All you need to do is hang around Bicycle Express on Halifax Street in Adelaide, climb in and hide amongst the endless racks of Lycra like the twisted love child of Phil Liggett and David Attenborough, and wait for the spectacle to unfold.

Without fail, such cunning and patience will be rewarded with the arrival of a large bunch of six-foot-tall, lean-and-clinically-toned crank crunchers, clad in black kits that bear only a hint of white trim, who waddle into the store on their cleats like some master



race of giant penguins.

These flightless birds are trapped somewhat hopelessly between the unadulterated cycling joy experienced by mere punters of the peloton, and the hard-earned credibility and satisfaction of the certified professional. Such penguins can often be observed mocking the diehard fan trying on a GreenEdge jersey, while simultaneously critiquing, with great authority, the failure of Rohan Dennis to take Richie Porte on Old Willunga Hill.

To be clear, the crew at Bicycling Express are top notch and blameless in this episode. They have a great range of gear. It's like Bunnings for bicyclists. But they must cater for all of earth's creatures ...

The general disdain

a hierarchy of privilege and limited access.

Fortunately for The Old Cranks and other rank-and-file randonneurs, the Cycling Revolution is well advanced Down Under and the Pros appear dead keen to take the sport to the people.

Having said all that, folks, I can barely express my embarrassment over the recent, self-indulgent behaviour of Miguelito "El Dingo Loco" de Pared.

As most punters would know, the much coveted Women's Road Race National Championship jersey has returned to its rightful home in the Blue Mountains west of Sydney. It resides about halfway between my garage and Tezza's back shed on the

[[In a shameless act of attention seeking, Miguelito purchased a replica of the regular Australian jersey and paraded-up and down Hawkesbury Road in the hope of being mistaken for our Spratty.]]

of the penguins towards amateurs and fanatics like you and I is reminiscent of the establishment's reaction to a young Tiger Woods – at the time unencumbered by his imminent litany of personal indiscretions – leading the wily popular masses down the privileged fairways of Augusta National Golf Course for the first time.

True enough, the average club-swinger was never granted full access to the Nineteenth Hole at Augusta, but they had a jolly good time in the rough and effectively exposed the conflicted desires of a sport that yearned for wider appeal while endeavouring to maintain

south side of Springwood. Immediately after the championships, Amanda Spratt could be seen sporting the national colours as she rode up and down her slice of the Great Dividing Range with her very proud old man.

In a shameless act of attention seeking, Miguelito purchased a replica of the regular Australian jersey and paraded-up and down Hawkesbury Road in the hope of being mistaken for our Spratty. He weighs 130 pounds more than Amanda, is one-and-a-half foot taller, sports an unkempt goatee and has a distinctly undisciplined gait on the bicicletta, but he gets ten outta ten for effort. 🐼

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Raymond Kreder,
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